STATE OF NEBRASKA

Pete Ricketts
Governor

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**RE: RESPONSE SUMMARY**
**CNH Industrial America LLC**
**Grand Island Plant**
**3445 West Stolley Park Road**
**Grand Island, NE 67703**

**NDEQ Facility #24731**

To Whom It May Concern:

The Nebraska Department of Environmental Quality (NDEQ) has considered all comments received and has made a final decision to modify and issue the Operating Permit for the above referenced facility. This Permit approves the operation of a farm machinery and equipment manufacturing facility in accordance with regulations contained in Title 129 - Air Quality Regulations.

The decision regarding issuance of this Operating Permit may be appealed under Neb. Rev. Stat. 81-1509. This appeal shall be done in accordance with the Administrative Procedure Act, Neb. Rev. Stat. Section 84-901 to 84-920 and Title 115 - Rules of Practice and Procedure. In addition, persons may petition the Administrator of the Environmental Protection Agency to object to the issuance of this permit. Unless the petitioner demonstrates that it was impracticable to raise objections during the 30-day public comment period, the petition shall only be based on objections that were raised during such period.

In preparing this summary, the NDEQ reviewed all comments made during the public comment period from July 18, 2016 to August 17, 2016 and listed all comments in the attached Responsiveness Summary. The Responsiveness Summary consists of four sections:

**Comment #**: The comment is summarized.

**Response and Rationale**: NDEQ's response to the comment raised and the rationale.

**Changes**: Any changes to the Permit and/or Fact Sheet are addressed.

**Applicable Regulations/Statutes**: This is a listing of regulations/statutes pertinent to the comment.

The NDEQ appreciates the time and the conscientious efforts of all that have commented. If you have any questions, please contact Stephenie Moyer or me at (402) 471-2189.

Sincerely,

**{ORIGINAL SIGNED}** **8-18-2016**

Shelley Schneider, Air Administrator — Date
Air Quality Division

Enclosure

**RESPONSE TO PUBLIC COMMENTS SUMMARY**
**On the Issuance of an Operating Permit for**
**CNH Industrial America LLC (Facility #24731)**

**Background Information:**

CNH Industrial America LLC submitted an Operating Permit application on February 6, 2013. This permit approves the operation of a farm machinery and equipment manufacturing facility performing fabrication, assembly, and painting of metal parts.

CNH Industrial America LLC submitted comments on August 17, 2016. EPA submitted an email on August 17, 2016 stating they did not have any comments on this permit. The following are NDEQ's responses to the comments received during the public comment period:

**COMMENT #1:** Page II-1. CNH previously submitted comments on the courtesy draft permit to strike Condition II.(A)(5). This condition starts:

Except for electronically generated records, all manually entered records of opacity readings, instrument readings, visual equipment inspections, log book entries, and any other record of equipment performance shall be initialed, or otherwise signed, by the individual who entered the record.

CNH is not aware of a regulatory requirement for this condition. It appears to increase the recordkeeping burden without any benefit. From EPA guidance on periodic monitoring and recordkeeping, monitoring and recordkeeping to ensure compliance should be designed to monitor and keep records of key parameters, be performed at a frequency consistent with the process and potential for violations and allow for detection of deviations. Adding the requirement for a signature or initials does not improve the ability of the current permit's monitoring and recordkeeping to achieve those goals. CNH again requests that this condition be deleted.

**RESPONSE AND RATIONALE:** This is standard language in all operating permits. This language identifies the person conducting the activities on the equipment (i.e. maintenance, visible emission surveys).

**CHANGES:** No changes.

**APPLICABLE REGULATIONS:** Title 129, Chapter 8, Section 004.02A3

**COMMENT #2:** Page II-3. CNH previously submitted comments on the courtesy draft permit to add a condition to the reporting section that indicates that there are other reporting requirements not contained in the reporting section. This was not added. For the sake of clarity and completeness, CNH again requests that a condition be added to Section II.B indicating that there are additional reporting requirements found in Sections IIIA and IIIB.

**RESPONSE AND RATIONALE:** Condition II.(B) applies to reporting requirements that are not specified in other parts of the permit (i.e. deviation reports, emission inventory, and certification of compliance). This is standard language for all operating permits. Reporting requirements for individual emission points (i.e. for NSPS or NESHAP requirements) are specified in the Condition III for that specified emission point.

**CHANGES:** No changes.

**RESPONSE TO PUBLIC COMMENTS SUMMARY**
**On the Issuance of an Operating Permit for**
**CNH Industrial America LLC (Facility #24731)**

**APPLICABLE REGULATIONS:** Title 129, Chapter 6 and Chapter 8, Sections 004.03, 008, and 012.05.

**COMMENT #3:** Pages IIIA-10-12. No due dates were listed for MMPP NESHAP reporting. CNH requests that the due dates be added to Condition III.(A)(5)(i)(ii). CNH also requests that the due dates be consolidated with other routine reporting (see comment #4 below).

**RESPONSE AND RATIONALE:** Per NESHAP Subpart MMMM, semiannual reporting is required per 40 CFR 63.3920(a)(1), but may change the scheduled dates with per mutual agreement with NDEQ [40 CFR 63.3920(a)(1) referencing 40 CFR 63.10(a)]. The semiannual reporting schedule changed from July 31/January 31 to September 30/March 31.

**CHANGES:** A new Condition III.(A)(5)(i)(ii)1. was added specifying the submittal dates of the semiannual reports. The other Conditions III.(A)(5)(i)(ii) were renumbered to accommodate the new condition. In the fact sheet, a sentence was added to the discussion of Condition III.(A)(5) on page 20 describing the change.

**APPLICABLE REGULATIONS:** 40 CFR 63.3920(a)(1) and §63.10(a)(7)

**COMMENT #4:** Page III.B-4-5. As allowed by each NESHAP regulation, CNH previously requested that the reporting due dates be consolidated for submitting the routine NESHAP and Title V reports. The current deadlines are as follows:

- The MMPP NESHAP requires semi-annual reporting of monitoring and deviations (Condition III.(A)(5)(i)(ii) of the draft permit). Although not stated in the permit, the MMPP NESHAP semi-annual reports are due July 31, and January 31 for the prior six calendar months per 40 CFR 63.3920.
- The boiler NESHAP requires annual, biennial and 5-year compliance reports for CNH's boilers. This means annual reports are due on January 31: starting 1 year after the compliance date, 2 years after the compliance date and 5 years after the compliance date, as applicable for each boiler. Please see additional comment #5 below about these due dates.
- The semi-annual monitoring and deviation reports (Condition II.(B)(1) of the draft permit) are due September 30 and March 31 each year, for the prior six calendar months.
- The certification of compliance (Condition II.(B)(5) of the draft permit) is due March 31 for the prior calendar year.

CNH requests that all semi-annual reports have the same due dates rather than different dates. These due dates would be September 30 and March 31.

CNH requests that all annual/biennial/5 year reports have the same due dates rather than different due dates. This due date would be: March 31.

**RESPONSE AND RATIONALE:** Per NESHAP Subpart DDDDD, annual, biennial, and 5-year compliance reporting is required per 40 CFR 63.7750(b)(1), but may change the scheduled dates with per mutual agreement with NDEQ [40 CFR 63.7750(b)(1) referencing 40 CFR 63.10(a)]. The annual/biennial/5-year reporting schedule changed from January 31 to March 31.

**CHANGES:** In Condition III.(B)(5)(b)2.A., the due date of the reports was changed from January 31 to March 31. In fact sheet, added a sentence to the discussion of Condition III.(B)(5) on page 21 describing the change.

**APPLICABLE REGULATIONS:** 40 CFR 63.7750(b)(1) and §63.10(a)(7)

**COMMENT #5:** Page IIIB-5. CNH requested that the boiler NESHAP requirements be added to the permit, which the NDEQ did and CNH agrees with the dates in the table at the top of this page. However, the footnote in Condition III.(B)(4)(d)(i)(ii) states that the due date for the first compliance date for existing boilers was due 1/31/2016 and this is incorrect. However, this means that the first annual, biennial and 5-year compliance reports for CNH's boilers are due on January 31, 2017 (1 year after the compliance date), January 31, 2018 (2 years after the compliance date) and January 31, 20121 (5 years after the compliance date), as applicable for each boiler depending on whether they are subject to annual, biennial or 5-year reporting frequency. The first compliance reports could not be due January 31, 2016 because this would have required preparing the certification of compliance with the requirements of the rule before the compliance date.

CNH requests that the footnote stating that the initial compliance report was due January 31, 2016 per 40 CFR 63.7510(e) and 40 CFR 63.7495(b) and the term "Next" in the third column of the table be removed.

**RESPONSE AND RATIONALE:** Since the dates for submitting the reports were change per Comment #4 above, the "Next" compliance date and associated footnote were removed to avoid confusion.

**CHANGES:** In Condition III.(B)(4)(d)(i)2. and Condition III.(B)(5)(b)2.A., the reference to compliance dates in the paragraph and table and associated table footnote was removed.

**APPLICABLE REGULATIONS:** 40 CFR 63.7750(b)(1) and 40 CFR 63.10(a)

**SUMMARY OF ADDITIONAL CHANGES:**

1. The permit and fact sheet were modified to update the effective date of Title 129 to July 20, 2016 to reflect the most current version of the regulations.

**Questions regarding this summary may be directed to:**

Air Quality Division-Permitting Section
Nebraska Department of Environmental Quality
PO Box 98922
Lincoln, NE 68509-8922

Pete Ricketts
Governor

STATE OF NEBRASKA

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# AIR QUALITY CLASS I OPERATING PERMIT

**PERMIT NUMBER: OP13R1-006**

**NDEQ ID:** 24371
**Program ID:** AIR 079 00010

**Permit Issued To:** CNH Industrial America LLC
**Name of Source in Application:** CNH Industrial America LLC

**Mailing Address:** PO Box 4902, Grand Island, Nebraska 68802
**Source Location:** 3445 W. Stolley Park Rd, Grand Island, Hall County, Nebraska

**Project Description:** This operating permit approves the operation of a farm machinery and equipment manufacturing facility performing fabrication, assembly, and painting of metal parts.

**Primary Standard Industrial Classification (SIC) Code:** 3523, Farm Machinery and Equipment

**Superseded Operating Permit(s):** Operating Permit #OPSPR1-0056 issued August 7, 2008.

Pursuant to Title 129, Chapter 14, of the Nebraska Air Quality Regulations, the public has been notified by prominent advertisement of the proposed operation of an air contaminant source and the thirty (30) day period allowed for comments has elapsed. This Operating Permit approves the operation of farm machinery and equipment manufacturing including fabrication, assembly, and painting of metal parts. This Operating Permit approves the operation of this source as identified in the Air Quality Operating Permit Application 13R1-006 received February 6, 2013, including any supporting information received prior to issuance of this permit. Additional details on the source, including estimated pollutant emissions, can be found in the accompanying Fact Sheet.

Compliance with this permit shall not be a defense to any enforcement action for violation of an ambient air quality standard. Unless otherwise noted the conditions of this permit are enforceable by the United States Environmental Protection Agency (USEPA) and the Nebraska Department of Environmental Quality (NDEQ). The permit holder, owner, and operator of the source shall assure compliance with all of the terms and conditions in this permit and the Attachments.

The undersigned issues this document on behalf of the NDEQ Director in accordance with Title 129 – Nebraska Air Quality Regulations as amended July 20, 2016.

**8-18-2016** — Date

**{ORIGINAL SIGNED}** — Shelley Schneider, Administrator, Air Quality Division

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## ABBREVIATIONS, SYMBOLS, and UNITS OF MEASURE

| | |
|---|---|
| AP-42 | Compilation of Air Pollutant Emission Factors, Volume I, Stationary Point and Area Sources |
| BACT | Best Available Control Technology |
| Btu | British Thermal Unit |
| bu | Bushel |
| CAA | Clean Air Act |
| CE | Control Equipment |
| cf | Cubic Feet |
| CFC | Chlorofluorocarbons |
| CEMS | Continuous Emissions Monitoring System |
| CFR | Code of Federal Regulations |
| CO | Carbon Monoxide |
| $CO_2$ | Carbon Dioxide |
| $CO_2e$ | Carbon Dioxide Equivalent |
| CP | Construction Permit |
| Director | Director of the Nebraska Department of Environmental Quality |
| dscf | Dry Standard Cubic Feet |
| dscfm | Dry Standard Cubic Feet per Minute |
| EMIS | Emergency Management Information System |
| EQC | Environmental Quality Council |
| EP | Emission Point |
| EU | Emission Unit |
| FIP | Federal Implementation Plan |
| FR | Federal Register |
| ft | Feet |
| FTIR | Fourier Transform Infrared |
| GHGs | Greenhouse Gases |
| HAP | Hazardous Air Pollutant(s) |
| HC | Hydrocarbons |
| hp | Horsepower |
| hr | Hour |
| lb | Pound |
| LDAR | Leak Detection and Repair |
| LNB | Low $NO_x$ Burner |
| MACT | Maximum Achievable Control Technology |
| Mgal | One Thousand Gallons |
| MMBtu | One Million British Thermal Units |
| MMgal | One Million Gallons |
| MMscf | One Million Standard Cubic Feet |
| MSDS | Material Safety Data Sheet |
| n/a | Not Applicable |
| NAAQS | National Ambient Air Quality Standards |
| NDEQ | Nebraska Department of Environmental Quality |
| NESHAP | National Emission Standards for Hazardous Air Pollutants |
| $NO_2$ | Nitrogen Dioxide |
| $NO_x$ | Nitrogen Oxides |
| $N_2O$ | Nitrous Oxide |
| NSPS | New Source Performance Standard |
| NSR | New Source Review |
| OP | Operating Permit |
| PAL | Plant-wide Applicability Limit |
| Pb | Lead |
| PEMS | Predictive Emissions Monitoring System |
| PM | Particulate Matter |
| $PM_{2.5}$ | Particulate Matter with an aerodynamic diameter equal to or less than 2.5 microns |
| $PM_{10}$ | Particulate Matter with an aerodynamic diameter equal to or less than 10 microns |
| $PM_{10}$ (total) | Filterable and condensable particulate matter |
| ppb | Parts per Billion |
| ppm | Parts per Million |
| ppmv | Parts per Million by Volume |
| ppmvd | Parts per Million by Volume, dry basis |
| PSD | Prevention of Significant Deterioration |
| PTE | Potential to Emit |
| scf | Standard Cubic Feet |
| SIC | Standard Industrial Classification |
| SIP | State Implementation Plan |
| $SO_2$ | Sulfur Dioxide |
| $SO_x$ | Sulfur Oxides |
| Title 129 | Title 129, Nebraska Air Quality Regulations |
| TDS | Total Dissolved Solids |
| tpy | Tons per year |
| TRS | Total Reduced Sulfur |
| TSP | Total Suspended Particulate Matter |
| USEPA | United States Environmental Protection Agency |
| UTM | Universal Transverse Mercator |
| VHAP | Volatile Hazardous Air Pollutant |
| VMT | Vehicle Miles Traveled |
| VOC | Volatile Organic Compound |
| yr | Year |

## I. GENERAL CONDITIONS

(A) Administrative amendment of this permit for a change in ownership or operational control of this source is allowed provided the NDEQ determines that no other change in the permit is necessary and a written agreement containing a specific date for transfer of permit responsibility, coverage, and liability between the current and new permittee has been submitted to the NDEQ (Title 129, Chapter 15, Section 001.01D).

(B) The permittee shall allow the NDEQ, USEPA or an authorized representative, upon presentation of credentials (Title 129, Chapter 8, Section 012.02) to:

(1) Enter upon the permittee's premises at reasonable times where a source subject to this permit is located, emissions-related activity is conducted, or where records must be kept under the conditions of this permit, for the purpose of ensuring compliance with this permit or applicable requirements;

(2) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit, for the purpose of ensuring compliance with this permit or applicable requirements;

(3) Inspect at reasonable times any facilities, pollution control equipment, including monitoring and air pollution control equipment, practices, or operations regulated or required under this permit, for the purpose of ensuring compliance with this permit or applicable requirements;

(4) Sample or monitor, at reasonable times, substances or parameters for the purpose of ensuring compliance with the permit or applicable requirements.

(C) Regulatory authority:

(1) Title 40 Protection of Environment, Code of Federal Regulations that apply to the source including those not currently delegated to Nebraska or not yet included in Title 129 - Nebraska Air Quality Regulations, and

(2) Title 129 - Nebraska Air Quality Regulations that apply to the source as amended July 20, 2016.

(D) The permittee shall comply with 40 CFR part 82, Protection of the Stratospheric Ozone. Affected controlled substances include, but are not limited to, chlorofluorocarbons and hydrochlorofluorocarbon refrigerants, halons, carbon tetrachloride, and methyl chloroform (specific affected controlled substances are listed in 40 CFR part 82, Subpart A, Appendices A, (Class I) and B (Class II).

The following subparts and Sections of 40 CFR part 82 are conditions of this permit:

Subpart A - Production and Consumption Controls

Subpart B - Servicing of Motor Vehicle Air Conditioners

Subpart E - Labeling of Products Using Ozone-Depleting Substances: Sections 82.106 Warning statement requirements, 82.108 Placement of warning statement, 82.110 Form of label bearing warning statement, and 82.112 Removal of label bearing warning statement

Subpart F- Recycling and Emissions Reduction: Sections 82.156 Required

practices, 82.158 Standards for recycling and recovery equipment, 82.161 Technician certification, and 82.166 Reporting and recordkeeping requirements

Subpart G -Significant New Alternatives Policy Program

(E) This permit is issued for a fixed term of five (5) years. A renewal application shall be submitted to the NDEQ a minimum of six (6) months and a maximum of eighteen (18) months before permit expiration. Provided their application is submitted within the above timeframe, the source may continue to operate without a permit from the date the application is determined to be complete until final action on the application is taken by the NDEQ (Title 129, Chapter 8, Section 003, and Chapter 7, Section 002.06 and Section 003.04).

(F) The permittee shall comply with all conditions of this permit. Any permit noncompliance shall constitute a violation of the Nebraska Environmental Protection Act and the Federal Clean Air Act, and is grounds for enforcement action; permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application (Title 129, Chapter 8, Section 007.01).

(G) It shall not be a defense for a permittee in an enforcement action to claim that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit (Title 129, Chapter 8, Section 007.02).

(H) This permit may be modified; revoked, reopened, and reissued; or terminated for cause in accordance with Title 129 and Title 115, Rules of Practice and Procedure. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not supersede any permit condition (Title 129, Chapter 8, Section 007.03).

(I) Conditions under which this permit will be reopened, revoked and reissued or terminated during its term for cause, include but are not limited to (Title 129, Chapter 8, Section 010, and Chapter 15, Section 006):

(1) Additional applicable requirements under the Nebraska Environmental Protection Act or the Federal Clean Air Act, which become applicable to this source with a remaining permit term of three (3) or more years. No such reopening will occur if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended;

(2) Additional requirements, including excess emissions requirements, that become applicable to an affected source under the acid rain program under Chapter 26;

(3) A determination by the Director or the Administrator of USEPA that:

(a) The permit must be revoked and reissued to ensure compliance with the applicable requirements;

(b) The permit contains a material mistake or that inaccurate statements were made in the emissions standards or other terms or conditions of the permit;

(c) An applicable requirement or applicable requirement under the

Federal Clean Air Act applies which was not identified by the permittee in its application;

(J) This permit may be revoked during its term for cause, including but not limited to (Title 129, Chapter 8, Section 010, and Chapter 15, Section 006.02):

(1) The existence at the source of unresolved noncompliance with applicable requirements or a term or condition of this permit, and refusal of the permittee to agree to an enforceable schedule of compliance to resolve the noncompliance;

(2) The submittal by the permittee of false, incomplete, or misleading information to the NDEQ or USEPA;

(3) A determination by the Director that the permitted source or activity endangers human health or the environment and that the danger cannot be removed by a revision of this permit; or

(4) The failure of the permittee to pay a penalty owed pursuant to court order, stipulation and agreement, or order issued by the Administrator of the USEPA.

(K) This permit does not convey any property rights of any sort, or any exclusive privilege (Title 129, Chapter 8, Section 007.04).

(L) The permittee shall furnish to the NDEQ, within the time specified by the NDEQ, any information requested by the NDEQ in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the NDEQ copies of records required to be kept in accordance with the permit or, for information claimed to be confidential, the permittee may furnish such records along with a claim of confidentiality pursuant to Title 115 - Rules of Practice and Procedure (Title 129, Chapter 8, Section 007.05).

(M) The provisions of this permit supersede the provisions of any previously issued operating or construction permit. The applicable requirements of previously issued construction permits are now conditions of this permit (Title 129, Chapter 8, Sections 002 and 007.06).

(N) In the event of a challenge to any portions of this permit, the unchallenged permit requirements shall remain valid (Title 129, Chapter 8, Section 006).

(O) The following methods may be used to determine compliance with the terms and conditions in this permit (Title 129, Chapter 34, Section 008):

(1) Any compliance test method specified in the State Implementation Plan;

(2) Any test or monitoring method approved for the source in a permit issued pursuant to Title 129, Chapter 8, 17, 19, or 26;

(3) Any test or monitoring method provided for in Title 129; or

(4) Any other test, monitoring, or information-gathering method that produces information comparable to that produced by any method described in I.(O)(1) through (3).

(P) Open fires are prohibited except as allowed by Title 129, Chapter 30.

(Q) Particulate Matter – General Requirements (Title 129, Chapter 32):

(1) The permittee shall not cause or permit the handling, transporting or storage of any material in a manner which allows particulate matter to become airborne in such quantities and concentrations that it remains visible in the ambient air beyond the property line.

(2) The permittee shall not cause or permit the construction, use, repair or demolition of a building, its appurtenances, a road, a driveway, or an open area without applying all reasonable measures to prevent particulate matter from becoming airborne and remaining visible beyond the property line. Such measures include, but are not limited to, paving or frequent cleaning of roads, driveways and parking lots; application of dust-free surfaces; application of water; and planting and maintenance of vegetative ground cover.

(R) Application for review of plans or advice furnished by the Director will not relieve the permittee of legal compliance with any provision of these regulations, or prevent the Director from enforcing or implementing any provision of these regulations (Title 129, Chapter 37).

(S) If and when the Director declares an air pollution episode as defined in Title 129, Chapter 38, Section 003.01B, 003.01C, or 003.01D, the permittee shall immediately take all required actions listed in Title 129, Appendix I, Paragraph 1.1, 1.2, and 1.3, respectively, until the Director declares the air pollution episode terminated (Title 129, Chapter 38, Section 003).

## II. SPECIFIC CONDITIONS

Terms and conditions of this permit are in accordance with the requirements of Title 129, Chapter 8, Section 001. The specific applicable requirement that is the basis for each specific permit condition is listed with each permit condition.

(A) Recordkeeping: To ensure compliance with this permit, records shall be maintained as outlined below. Records include, but are not limited to: copies of all application materials, notifications, reports, test protocols, test results, and plans; and, originals of all required monitoring results, measurements, inspections, and observations (Title 129, Chapter 8, Section 004.02B):

(1) All records required by this permit shall be kept on-site for a minimum of five (5) years and shall be clear and readily accessible to NDEQ representatives, unless otherwise specified in this permit.

(2) Monthly calculations and records required throughout this permit shall be compiled no later than the fifteenth ($15^{th}$) day of each calendar month and shall include all records and calculations generated through the previous calendar month, unless otherwise specified in this permit.

(3) The source shall keep the following records for each malfunction, start-up and shutdown where emissions were, or may have been, in excess of an emission limitation or standard (Title 129, Chapter 6, Sections 002 and 005; Chapter 8, Section 004.03B; Chapter 11; and Chapter 35, Sections 002, 004 and 005):

(a) The identity of the equipment.

(b) Reason for, or cause of, the malfunction, shutdown, or start-up.

(c) Duration of period of excess emissions.

(d) Date and time of the malfunction, shutdown, or start-up.

(e) Physical and chemical composition of pollutants whose emissions are affected by the action.

(f) Methods, operating data, and/or calculations used to determine these emissions.

(g) Quantification of emissions in the units of the applicable emission control regulation.

(h) All measures utilized to minimize the extent and duration of excess emissions during the malfunction, shutdown, and start-up.

(4) The source shall keep records of maintenance performed on all permitted emission units, permitted control equipment, and required monitoring equipment (Title 129, Chapter 8, Section 004.01C; Chapter 11, Section 001; Chapter 34, Section 006; and Chapter 35, Sections 006.02 and 006.05).

(5) Except for electronically generated records, all manually entered records of opacity readings, instrument readings, visual equipment inspections, log book entries, and any other record of equipment performance shall be initialed, or otherwise signed, by the individual who entered the record.

(6) Operation and maintenance manuals, or equivalent documentation, detailing proper operation and maintenance of all permitted emission

units, required control equipment and required monitoring equipment shall be kept for the life of the equipment.

(B) Submittals/Reporting:

All submittals, including reports, required by Condition II.(B) and Condition II.(D)(1)(g) shall contain a certification by a responsible official of truth, accuracy, and completeness. This certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete (Title 129, Chapter 1, Section 135; Chapter 7, Section 008; and Chapter 8, Section 012.01).

The following shall be submitted to the NDEQ as specified:

(1) The permittee shall submit a report of applicable monitoring and all instances of deviations from permit requirements every six (6) calendar months to the NDEQ. The report for the first six (6) months (January through June) shall be submitted by September 30 of each year. The report for the second six (6) months (July through December) shall be submitted by March 31 of the following year (Title 129, Chapter 8, Section 004.03A).

(2) The permittee shall report all deviations from permit requirements, including those attributable to start-ups, shutdowns or malfunctions, the probable cause of such deviations, and any corrective actions or preventive measures taken. The probable cause, corrective actions, or preventive measures do not have to be provided if that information has already been submitted in other reports to the NDEQ, such as for 40 CFR 60.7; however reported deviations must reference these other reports. All reports of deviations must be submitted within the time frame as per Conditions II.(B)(2)(a), (b), and (c) below(Title 129, Chapter 11, Chapter 8, Sections 004.03 and 004.04, and Chapter 35, Sections 004 and 005).

(a) Any deviation resulting from emergency or upset conditions shall be reported within two (2) working days of the date on which the permittee first becomes aware of the deviation if the permittee wishes to assert the affirmative defense authorized under Chapter 11 of Title 129. The report may be submitted initially without a certification by the responsible official, as required by Condition II.(B) above, if an appropriate certification is provided within ten (10) days thereafter, together with the information required under Condition II.(A)(3) and any corrected or supplemental information required concerning the deviation.

(b) Any deviation that poses an imminent and substantial danger to public health, safety, or the environment shall be reported as soon as is practicable. The report may be submitted initially without a certification by a responsible official in accordance with Condition II.(B) above, if an appropriate certification is provided within ten (10) days thereafter, together with any corrected or supplemental information required concerning the deviation.

(c) All other deviations shall be reported as per Condition II.(B)(1).

(3) The permittee shall submit completed emission inventory forms for the preceding calendar year to the NDEQ by March 31 of each year (Title

129, Chapter 6).

(4) The permittee shall submit fees, due July 1 of each year, based on the actual emission tonnage, up to and including 4,000 tons per year for each regulated pollutant for fee purposes, as established in the emission inventory for the previous calendar year (Title 129, Chapter 8, Section 008 and Chapter 29).

(5) Certification of compliance with the terms and conditions of this permit, including emission limitations, standards, or work practices, for the preceding calendar year, shall be submitted to the NDEQ and to USEPA Region VII's Air Compliance Coordinator by March 31 of each year. The report shall be certified by a responsible official in accordance with Condition II.(B) and shall include the following (Title 129, Chapter 8, Section 012.05).

(a) The identification of each term or condition of the permit that is the basis of the certification;

(b) The compliance status;

(c) A determination of whether compliance was continuous or intermittent; and

(d) The methods used for determining the compliance status of the source, currently and over the reporting period.

(6) Any emissions due to malfunctions, unplanned shutdowns, and ensuing start-ups that are, or may be in excess of applicable emission limitations shall be reported to the NDEQ in accordance with Condition II.(B)(2)(a).

(C) Changes allowed for without an operating permit revision (Title 129, Chapter 15, Section 007):

(1) The permittee may make the changes identified in Condition II.(C)(1)(a) within a permitted facility without a permit revision if the change is not a modification under Title 129, Chapters 18, 23, 27, or 28; the change does not require a construction permit under Chapters 17 or 19; and the change does not result in the emissions allowable under the permit (whether expressed therein as a rate of emissions or in the terms of total emissions) being exceeded. The permit shield in Condition II.(E) shall not apply to any change made under this condition (Title 129, Chapter 15, Section 007.01).

(a) Changes in the configuration of the source's equipment, defined as "Section 502(b)(10) changes", as defined in Title 129, Chapter 1, Section 139 (Title 129, Chapter 15, Section 007.01A). Written notification of these changes shall be sent to the NDEQ as follows:

(i) Non-Emergencies (Title 129, Chapter 1, Section 139; Chapter 15, Section 007.01):

1. Written notification shall be received by the NDEQ a minimum of seven (7) days in advance of the proposed changes;

(ii) Emergencies (Title 129, Chapter 1, Section 139; Chapter 15, Section 007.01):

1. Initial notification shall be made within two working days of the date on which the permittee first becomes aware of the need for the change;

2. A follow-up written notification shall be submitted as soon as practicable; and,

3. The notifications shall include an explanation of the nature of the emergency.

(iii) Required information (Title 129, Chapter 15, Section 007.01.A):

1. A brief description of the change within the permitted source (Chapter 15, Section 007.01A1);

2. The date on which the change will occur (Chapter 15, Section 007.01A2);

3. Any change in emissions (Chapter 15, Section 007.01A3); and,

4. Any permit term or condition that is no longer applicable as a result of the change (Chapter 15, Section 007.01A4).

(iv) A copy of the notification shall be attached to the source's copy of the operating permit.

(2) The permittee may make changes that are not defined as "Section 502(b)(10) changes" within a permitted source without a permit revision if the change is not a modification under Title 129, Chapters 18, 23, 27, or 28; and the change is not a change which would require a construction permit under Chapters 17 or 19 (Title 129, Chapter 15, Section 007.02).

(a) Each such change shall meet all applicable requirements and shall not violate any existing permit term or condition (Title 129, Chapter 15, Section 007.02A).

(b) The source shall provide contemporaneous written notice to the Director and the Administrator of EPA, except for changes that qualify as insignificant activities under the provisions of Title 129, Chapter 7, Sections 006.03 and 006.04. Such written notice shall include (Title 129, Chapter 15, Section 007.02B):

(i) A description of each change;

(ii) The date the change will be made;

(iii) A description of any change in emissions;

(iv) A list of the pollutants emitted; and,

(v) A list of any applicable requirements that would apply as a result of the change, including terms and conditions established in in the relevant operating permit for synthetic minor purposes.

(c) A copy of the notification in Condition II.(C)(2)(b) shall be attached to the source's copy of the operating permit.

(d) Any change under Condition II.(C)(2) shall not qualify for a permit shield under Chapter 8, Section 014 (Title 129, Chapter 15, Section 007.02C).

(e) The permittee shall keep a record describing changes made at the source that result in emissions of a regulated air pollutant subject to an applicable requirement, but not otherwise regulated under the permit, and emissions resulting from those changes (Title 129, Chapter 15, Section 007.02D).

(f) Upon review of a notice submitted in accordance with Condition II.(C)(2)(b), the NDEQ may require a source to apply for an operating permit if the change does not meet the requirements of Condition II.(C)(2) [Title 129, Chapter 15, Section 007.02E].

(3) Testing requirements:

(a) Testing may be required if a change reported under Condition II.(C)(1) or II.(C)(2) involves an emissions unit that was previously tested (Title 129, Chapter 8, Section 004.01B and 015; Chapter 34).

(D) Testing:

(1) Performance tests, when required by the NDEQ, shall be completed as follows:

(a) The owner or operator shall provide the NDEQ at least thirty (30) days written notice prior to testing to afford the NDEQ an opportunity to have an observer present. The NDEQ may, in writing, approve a notice of less than 30 days. If the testing is pursuant to an underlying requirement contained in a federal rule, the notice provisions of the underlying requirement apply (Title 129, Chapter 34, Section 003).

(b) The owner or operator shall provide the NDEQ with an emissions testing protocol at least thirty (30) days prior to testing (Title 129, Chapter 34, Section 003).

(c) Testing shall be conducted according to the methodologies found in Title 129, Chapter 34, Section 002, or other NDEQ approved methodologies (Title 129, Chapter 34, Section 002).

(d) Performance tests shall be conducted while operating at full capacity, unless otherwise specified by the NDEQ (Title 129, Chapter 8, Sections 004.01B and 012.01).

(e) Performance tests shall be conducted for a minimum of three (3) one-hour runs unless another run-time is specified by the applicable Subpart or as deemed appropriate by the NDEQ (Title 129, Chapter 8, Sections 004.01B and 012.01B).

(f) The owner or operator shall monitor and record the operating parameters for process and control equipment during the performance testing required in the permit (Title 129, Chapter 8,

Sections 004.01B and 012.01).

(g) A certified written copy of the test results, signed by the person conducting the test, shall be provided to the NDEQ within sixty (60) days of completion of the test and will, at a minimum, contain the following items (Title 129, Chapter 8, Sections 004.01B and 012.01, and Chapter 34, Section 002.07):

(i) A description of:

1. The operating parameters for the emissions unit during testing. Examples include, but are not limited to, production rates, process throughputs, firing rates of combustion equipment, or fuel usage; and,

2. The operating parameters for the control equipment during testing. Examples include, but are not limited to, baghouse fan speeds, scrubber liquid flow rates, or pressure drop across the control device.

(ii) Copies of all data sheets from the test run(s).

(iii) A description and explanation of any erroneous data or unusual circumstance(s) and the cause for such situation.

(iv) A final conclusion section describing the outcome of the testing.

(E) A permit shield is granted (Title 129, Chapter 8, Section 014).

(1) During the term of this permit compliance with the Specific Conditions, identified in Conditions II.(A), (B), (F), (I) and III., constitutes compliance with the underlying applicable requirements. The origin and/or authority for each applicable requirement is identified in the condition.

(2) The permit shield does not affect:

(a) The emergency provisions of Neb. Rev. Stat. §81-1507 of the Nebraska Environmental Protection Act;

(b) The USEPA's authority under the provisions of Section 303, Emergency Powers, of the Clean Air Act;

(c) Liability for any violation of applicable requirements or applicable requirements under the Federal Clean Air Act prior to or at the time of permit issuance;

(d) The applicable requirements of Chapter 26;

(e) The authority of the NDEQ or USEPA to obtain information; or

(f) Any other permit provisions, terms, or conditions, including, but not limited to, construction permits issued pursuant to Chapter 17 or permits issued pursuant to other State authorities and Titles.

(3) The NDEQ has determined the requirements specifically identified in the following table are not applicable to this source. Therefore a permit shield is granted as allowed under Title 129, Chapter 8, Section 014.02B:

| Requirement | Shield Request Basis and Determination |
|---|---|
| Title 129, Chapter 18, Section 001.69 – NSPS Subpart CCCC – Commercial and Industrial Solid Waste Incineration Units | Bake-off ovens EP#8914 and EP#8932 meet the definition of burn-off ovens as specified in §60.2265. This definition states the burn-off ovens are not a regulated emission unit under this subpart. |
| Title 129, Chapter 28, Section 001.77 – NESHAP Subpart GGGGG – Site Remediation | This Subpart regulates remediation projects. At this point in time, CNH does not anticipate taking remedial action in the near future.<br><br>History: CNH conducted a remediation in accordance with the voluntary clean-up program in Nebraska (RAPMA ID# 36-336-4917), which included removal of impacted soil and paint-related material from the property. This activity was initiated October 2003 and completed in January 2004 and did not involve an affected source as defined in the standard. Therefore, there are (or were) no applicable emission points.<br><br>The remedial activity did not involve any regulated emission from activities such as process venting, remediation material management units or equipment leaks. The material that was removed from the site for disposal was characterized to determine disposal requirements. The impacted soil that was disposed as non-hazardous waste contained average VOHAP concentrations below 10 ppm, i.e., the threshold identified in the standard for applicability. The material that contained paint material and was determined to be hazardous waste, due to concentration of lead, was transported (under hazardous waste manifest) for disposal to the Clean Harbors incinerator facility in Kimball, Nebraska. The disposal facility is permitted under RCRA and manages the material in accordance with requirements under 40 CFR Part 63, Subpart GGGGG.<br><br>In September 2006, a pilot program for in-situ enhanced biodegradation of VOCs in groundwater was initiated. This included two treatment events conducted in September/October 2006 and April 2007, involving application of molasses, nutrients, yeast extract, and inoculum via six injection wells. The rationale for not being covered by the MACT is the same as above. |
| Title 129, Chapter 28, Section 001.74 – NESHAP Subpart PPPPP - Engine Test Cells and Stands | The engine test stand is for engines that have been installed. NESHAP Subpart PPPPP applies to engine test stands for uninstalled stationary or uninstalled mobile (motive) engines [§63.9285(a) and (b)]. |

| Requirement | Shield Request Basis and Determination |
|---|---|
| Title 129, Chapter 28, Section 001.70 – NESHAP Subpart DDDDD – Industrial, Commercial, and Institutional Boilers and Process Heaters at Major Sources of HAPs | Emission Units 2106, 8917, and 8918 are not subject to this subpart since these units do not meet the definition of process heaters as specified in §63.7575. These emission units are the air-makeup heater for burn-off oven vestibule, powder coat dryoff oven, and cure oven. |

(F) All permitted emission units, control equipment, and monitoring equipment shall be properly installed, operated, and maintained (Title 129, Chapter 8, Section 004.01C; Chapter 11, Section 001; Chapter 34, Section 006; and Chapter 35, Sections 006.02 and 006.05).

(G) Requirements Becoming Effective During the Term of this Permit: The source will meet, in a timely manner, applicable requirements that become effective during the permit term, unless a more detailed schedule is expressly required by the applicable requirement. (Title 129, Chapter 7, Section 006.02H, and Chapter 8, Section 012.03).

(H) In the event of any discrepancies between applicable NSPS or NESHAP standards and the terms and conditions of this permit, the NSPS or NESHAP standards shall take precedence unless they are less stringent (Title 129, Chapter 8, Section 013).

(I) Source-Wide Limitations:

(1) Operational and Monitoring Requirements:

(a) To demonstrate compliance with Condition II.(D)(1)(d), the permittee shall monitor the daily production/throughput rate, after the effective date of this permit, for emission units that have had a performance test (Title 129, Chapter 34, Section 006).

(2) Recordkeeping and Reporting Requirements:

(a) To demonstrate compliance with Condition II.(I)(1)(a) above, the owner or operator of the source shall keep records of the daily production/throughput rate, after the effective date of this permit, for all emission units that have had a performance test. (Title 129, Chapter 8, Section 004.02, and Chapter 34, Section 006).

(b) For emission units that have had a performance test, the permittee shall make a one-time notification to the NDEQ within fifteen (15) days of when there is a ten (10) percent increase in daily production/throughput rate, after the effective date of this permit, over the tested rate recorded during the most recent valid performance test. If there are subsequent ten (10) percent increases over the rate most recently notified to the NDEQ, the permittee shall make a one-time notification to the NDEQ of each such subsequent increase (Title 129, Chapter 8, Section 013).

Exemption: The reporting requirements of this condition do not apply for those pollutants from an emission unit that has been tested and uses a CEMS, PEMS, or COMS to demonstrate compliance.

(c) The following definitions apply for purposes of Conditions II.(I)(1)(a), II.(I)(2)(a), and II.(I)(2)(b) above:

(i) "rate" shall mean the production or throughput of an emissions unit in the same units of production or throughput as the "tested rate" as defined below; and,

(ii) "tested rate" shall mean the production or throughput rate of an emissions unit as recorded in the most recent valid performance test and reported to the NDEQ in the source's written copy of the test results, or test report, documenting the maximum capacity of the unit(s). The tested rate shall be extrapolated to daily. Examples include, but are not limited to, tons per hour to tons per day or gallons per hour to gallons per day.

(d) When the source makes physical or operational changes to an emissions unit or associated control equipment that may cause the original testing to not represent current operating conditions or emissions, the source shall submit a notification of the change. Such notification shall be postmarked within fifteen (15) days after such change. The NDEQ may require performance testing based on review of the specific changes identified in the notification and the resulting potential impact on emissions from the unit(s) and/or performance of the control equipment (Chapter 34, Section 001).

(i) This notification requirement applies to emissions units and/or control equipment that meet the following requirements, except as provide in condition II.(I)(2)(d)(iii):

1. Emissions from the emissions unit and/or control equipment is subject to an emissions limit; and

2. A valid performance test has been conducted for the pollutant to which the emissions limit applies.

3. Changes that may cause emissions to increase or invalidate prior testing include, but are not limited to, increasing the capacity of an emissions unit, changing the operational parameters of any control equipment outside of the range allowed for under this permit that makes the control equipment less efficient, changing the type of scrubber packing, or increasing the inlet pollutant loading of any control equipment.

(ii) The notification shall include the date of the changes, a description of the changes made, and an evaluation of the resulting impact on emissions from the emissions units and/or control equipment.

(iii) The above notification requirements do not apply when compliance with the emission limitation is demonstrated through the use of a CEMS or PEMS.

## III. SPECIFIC CONDITIONS FOR AFFECTED EMISSION POINTS:

(A) Specific Conditions for Surface Coating and Associated Operations

(1) Permitted Emission Points:

The following table contains a description of emission points, control equipment, emission units, and relevant standards at the source at the time of permit issuance, in accordance with operating permit application #13R1-006, received February 6, 2013, including any supporting information received prior to issuance of this permit:

| Emission Point ID# | Control Equipment ID# and Description | Emission Unit Description[1] | Relevant Standards |
|---|---|---|---|
| 7961 | - | Pretreatment System (9-Stage Washer), constructed in 2002. | NESHAP Subparts A and MMMM |
| 7962 | - | E-Coat System, 99% transfer efficiency, constructed in 2002. | |
| 7962-T | - | E-Coat Feed Storage Tank, 99% transfer efficiency, constructed in 2002. | |
| 7966 | - | Cooling Tunnel, constructed in 2002. | |
| 7969 | - | Inspection and Preparation Booth, constructed in 2002. | |
| 7970 | - | Paint Sludge Removal System, constructed in 2002. | |
| 7971 | - | Flash Off Tunnel constructed in 2002. | |
| 7975 | Dry fabric filters, with 98% control efficiency for particulate matter | Touch-up Booth #1, constructed in 1965. | |
| 7982 | Dry fabric filters, with 98% control efficiency for particulate matter | Touch-up Booth #2, constructed in 1965 | |
| 7986 | - | Paint Mixing Room for Topcoat Booths, constructed in 2002. | |
| 7988 | Downdraft water wash system (scrubber), with 99.5% control efficiency for particulate matter | Topcoat Booth No. 1, 50% transfer efficiency, constructed in 2002. | |
| 7989 | Downdraft water wash system (scrubber), with 99.5% control efficiency for particulate matter | Topcoat Booth No. 2, 50% transfer efficiency, constructed in 2002. | |
| 4814 | - | Paint Stripper Tank, constructed in 1965. | |
| 8907 | Dry fabric filters, with 98% control efficiency for particulate matter | Index Paint System – Booth No. 1 (Primer), installed in 2007 | |
| 8908 | Dry fabric filters, with 98% control efficiency for particulate matter | Index Paint System – Booth No. 2 (Topcoat), installed in 2007 | |

| Emission Point ID# | Control Equipment ID# and Description | Emission Unit Description[1] | Relevant Standards |
|---|---|---|---|
| 8919 | Dry fabric filters, with 98% control efficiency | Powder Coat Booth #1, with a reclamation system, with 90% reclamation efficiency, installed in 2008. | NESHAP Subparts A and MMMM |
| 8920 | Dry fabric filters, with 98% control efficiency | Powder Coat Booth #2, with a reclamation system, with 90% reclamation efficiency, installed in 2008. | |
| 8921 | Dry fabric filters, with 98% control efficiency | Powder Coat Booth #3, with a reclamation system, with 90% reclamation efficiency, installed in 2008. | |
| 8922 | Dry fabric filters, with 98% control efficiency | Powder Coat Manual Booth, with a reclamation system, with 90% reclamation efficiency, installed in 2008. | |

[1] The project to construct the emission units (Emission Point #s 7961, 7962, 7962-T, 7966, 7969, 7970, 7971, 7986, 7988, and 7989 in 2002, started in September 2002. This identifies these units as new units per NESHAP Subpart MMMM.

(2) Applicable NSPS and NESHAP Requirements

(a) At the time of permit issuance, there are no NSPS requirements applicable to the emission units listed in Condition III.(A)(1).

(b) Upon issuance of this permit, the source shall demonstrate compliance with all applicable NESHAP Subpart A and MMMM requirements [Title 129, Chapter 28, Section 001.81].

(i) When allowed by NESHAP Subpart MMMM, the source has flexibility to change compliance options for each emission unit during the term of this permit. When changing emission unit compliance options, the source shall notify the NDEQ, in writing, a minimum of 30 days prior to the change. The notification shall include the following: [Title 129, Chapter 8, Section 013]:

1. The date of the change; and,

2. The new compliance option that has been chosen.

(3) Emission Limitations and Testing Requirements:

(a) Pollutant emission rates from each emission point identified in the table below shall not exceed the permitted limits. Performance testing, if required, shall be conducted in accordance with Condition II.(D).

| Emission Point ID# | Pollutant | Permitted Limit | Averaging Period | Basis for Permit Limit | Performance Testing Required |
|---|---|---|---|---|---|
| 7961, 7962, 7962-T, 7966, 7969, 7970, 7971, 7975, 7982, 7986, 7988, 7989, 4814, 8907, and 8908 | VOC | 390.8 tons/yr, combined[1],[2] | Consecutive twelve (12) months | Construction Permit CP07-0035 issued September 7, 2007 Condition III.(A)(2) | No |
| 7961, 7962, 7962-T, 7966, 7969, 7970, 7971, 7986, 7988, 7989, 8907, 8908, 8919, 8920, 8921, and 8922 | Organic HAP | 1.9 lb HAP/ gal coating solids, combined[3] | Consecutive twelve (12) months | Title 129, Chapter 28, Sec. 001.81; NESHAP Subpart MMMM, 40 CFR 63.3890(a)(1); Construction Permit CP07-0035 issued September 7, 2007 Condition III.(A)(4) | No |
| 7975, 7982, and 4814 | Organic HAP | 2.6 lb HAP/ gal coating solids, combined[3] | Consecutive twelve (12) months | Title 129, Chapter 28, Sec. 001.81; NESHAP Subpart MMMM, 40 CFR 63.3890(b)(1); Construction Permit CP07-0035 issued September 7, 2007 Condition III.(A)(4) | No |
| 7962 and 7962-T | PM (filterable) | 0.17 lb/hr, each unit[4] | 1-hour | Title 129, Chapter 20, Section 001 | No |
| 7988 and 7989 | PM (filterable) | 0.25 lb/hr, each unit[5] | 1-hour | Title 129, Chapter 20, Section 001 | No |
| 7975 and 7982 | PM (filterable) | 0.04 lb/hr, each unit[5] | 1-hour | Title 129, Chapter 20, Section 001 | No |
| 8907 and 8908 | PM (filterable) | 0.36 lb/hr, each unit[5] | 1-hour | Title 129, Chapter 20, Section 001 | No |
| 8919, 8920, and 8921 | PM (filterable) | 0.23 lb/hr, each unit[5] | 1-hour | Title 129, Chapter 20, Section 001 | No |
| 8922 | PM (filterable) | 0.19 lb/hr[5] | 1-hour | Title 129, Chapter 20, Section 001 | No |
| 7961, 7962, 7962-T, 7966, 7969, 7970, 7971, 7982, 7986, 7988, 7989, 4814, 8907, 8908, and 8919 | Opacity | <20 %, each unit[4],[5] | 6-minute | Title 129, Chapter 20, Section 004 | No |

| Emission Point ID# | Pollutant | Permitted Limit | Averaging Period | Basis for Permit Limit | Performance Testing Required |
|---|---|---|---|---|---|
| 8920, 8921, and 8922 | Opacity | <20 %, each unit[4],[5] | 6-minute | Title 129, Chapter 20, Section 004 | No |

[1] This emission limit only applies the coating, solvent and other chemical usage in the emission units. It does not include VOC emissions from the fuel combustion.
[2] Compliance with Condition III.(A)(4)(c) demonstrates compliance with VOC limitations.
[3] Compliance with Condition III.(A)(4)(g) demonstrates compliance with HAP limitations. The HAP limitations are for general use coating affected sources, as specified in NESHAP Subpart MMMM. If the emission units become affected sources in other coating categories (i.e. high performance coating) as specified in NESHAP Subpart MMMM, CNH must comply with the limitations per Condition III.(A)(3)(b).
[4] Compliance with Condition II.(F) [proper operation and maintenance of emission unit] demonstrates compliance with PM (filterable) and opacity limitations.
[5] Compliance with Condition III.(A)(4)(d) demonstrates compliance with PM (filterable) and opacity limitations.

(b) The permittee shall comply with all applicable emission limitations and testing requirements in NESHAP Subpart MMMM for emission units 7961, 7962, 7962-T, 7966, 7969, 7970, 7971, 7975, 7982, 7986, 7988, 7989, 4814, 8907, 8908, 8919, 8920, 8921, and 8922 [Title 129, Chapter 28 Section 001.81].

(4) Operational and Monitoring Requirements:

(a) Topcoat Booths 7988 and 7989 shall each be limited to a throughput of 42,250 gallons of coating during any consecutive twelve (12) month period [Title 129, Chapter 008, Section 013].

(b) Index Booths 8907 and 8908 shall each be limited to a throughput of 62,000 gallons of coating during any consecutive twelve (12) month period [Title 129, Chapter 008, Section 013].

(c) Compliance with the VOC limit in Condition III.(A)(3) shall be determined as follows [Construction Permit CP07-0035 issued September 7, 2007 Condition III.(A)(3)(a); Title 129, Chapter 8, Section 004.01A]:

(i) Emissions shall be calculated by assuming all VOCs used are emitted, unless the VOC content of waste materials is determined and each such material is stored separately from other materials. Materials include, but are not limited to, coatings, thinners, other additives, and cleaning material used in surface coating or associated activities. To calculate emissions, the following equation shall be used:

$$E = \sum_{i=1}^{n} v_i c_i - \sum_{j}^{m} v_j c_j$$

where:

E = emissions (pounds);

n = number of VOC-containing materials used;

m = number of VOC-containing waste materials shipped off-site

v = volume of each VOC-containing material (gallons);

c = VOC content of each material (pounds per gallon).

Note: The second term in this equation is optional. Should the source determine that it is not necessary to account for waste materials that are shipped off-site they may, at their discretion, not include this term in the emissions calculations.

(ii) The VOC content and the density or specific gravity of the materials shall be obtained from the manufacturer or supplier including Material Safety Data Sheets (MSDS), batch reports, Environmental Data Sheets (EDS), or equivalent documentation. If the VOC content is given as a range, the maximum value from the range shall be used. If it is necessary to convert weight to volume, divide the weight (pounds) of the material used by the density (pounds per gallon) of the material. If specific gravity is given, multiply the specific gravity by 8.34 lb/gallon (density of water) to obtain the density of the product.

(iii) The source shall sample the first shipment of any waste material shipped off site after this permit is issued for which VOC emission credit is being taken towards the limit in this condition. The sample shall be representative of the waste material shipment. Testing shall be conducted according to the procedures specified in Condition II.(D), as applicable. Testing shall be done in accordance with US EPA Test Method 25D. The source shall provide notification to the NDEQ of its intentions to test to allow the NDEQ an opportunity to determine the testing frequency. If the NDEQ has reason to believe that too much credit is being taken for waste material VOC emissions the frequency may be increased. The results of this test(s) shall be used to determine the VOC content of waste material shipped off site that is used for emission credit toward the VOC limit in this condition.

(d) Particulate matter emissions from the emission units identified in Condition III.(A)(1) shall be controlled by pollution control equipment as follows: Touch-up Booths (Units 7975 and 7982) shall each be controlled by dry fabric filters; Topcoat Booths #1 and #2 (Units 7988 and 7989) shall each be controlled by a downdraft water wash system (scrubber); Index Paint System's Booths #1 and #2 (Units 8907 and 8908) shall be controlled by dry fabric filters; and the Powder Coat Booths (Units 8919, 8920, 8921, and 8922) shall be controlled by dry fabric filters

[Construction Permit CP07-0035 issued September 7, 2007 Condition III.(A)(3)(b); Title 129, Chapter 8, Section 004.01C, and Chapter 20, Section 001].

(e) Operation and maintenance of each scrubber shall be in accordance with the following requirements [Construction Permit CP07-0035 issued September 7, 2007 Condition III.(A)(3)(c); Title 129, Chapter 20, Section 001]:

(i) The scrubber shall be operated and be controlling emissions at all times when the associated emission units are in operation.

(ii) The scrubber shall be equipped with devices capable of continuously monitoring operating parameters including, at a minimum, air downdraft operation, water circulation, and pressure differential (pressure drop). Operating parameter readings shall be recorded at least once per shift the scrubber is in operation.

(iii) The pressure drop across each system shall be greater than or equal to 75 mm of water.

(iv) Observations at least once each day of scrubber operation shall be conducted to determine whether there are leaks, noise, or other indications that corrective action is necessary. If corrective action is required, it shall occur immediately.

(f) Operation and maintenance of each dry fabric filters shall be in accordance with the following requirements [Construction Permit CP07-0035 issued September 7, 2007 Condition III.(A)(3)(d); Title 129, Chapter 8, Section 004.01C and Chapter 20, Section 001]:

(i) The fabric filters shall be used at all times the associated paint booth is in operation.

(ii) Fabric filters shall be inspected and replaced in accordance with the operation and maintenance manual or more frequently to ensure proper operation.

(iii) Observations at least once each day of paint booth operation shall be conducted to determine whether there are leaks, or other indications that corrective action is necessary. If corrective action is required, it shall occur immediately.

(iv) The permittee stall maintain an on-site inventory of spare fabric filters of each type used to ensure rapid replacement in event of fabric filter failure.

(g) The permittee shall comply with all applicable operational and monitoring requirements in NESHAP Subpart MMMM for emission units 7961, 7962, 7962-T, 7966, 7969, 7970, 7971, 7975, 7982, 7986, 7988, 7989, 4814, 8907, 8908, 8919, 8920,

8921, and 8922 [Title 129, Chapter 28, Section 001.81].

(5) Recordkeeping and Reporting Requirements:

(a) The permittee shall keep records documenting the amount of coating applied in each of following booths: 7988, 7989. 8907, and 8908, during each calendar month and during the previous twelve (12) consecutive calendar months to demonstrate compliance with Conditions III.(A)(4)(a) and (b) [Title 129, Chapter 8, Section 004.02].

(b) The permittee shall keep records of the quantity and description of all VOC and HAP containing materials used in the equipment listed in Condition III.(A)(1) during the previous calendar month and during the preceding period of twelve (12) consecutive calendar months. These materials include, but not limited to, all coatings, paints, thinners, cleaners, adhesives and solvents. Purchase records or equivalent information documenting the quantity of each material used shall be kept on site. The records shall be compiled by the 15th day of each month [Construction Permit CP07-0035 issued September 7, 2007 Condition III.(A)(5)(a); Title 129, Chapter 8 Section 004.02].

(c) The permittee shall keep records of calculated VOC emissions from the equipment listed in Condition III.(A)(1) for each calendar month and for the preceding period of twelve (12) consecutive calendar months to document compliance with the VOC limit in Condition III.(A)(3) [Construction Permit CP07-0035 issued September 7, 2007 Condition III.(A)(5)(b); Title 129, Chapter 8 Section 004.02].

(d) MSDS or equivalent information documenting the VOC and HAP content of materials used per Condition III.(A)(4)(a)(ii) shall be kept on-site [Construction Permit CP07-0035 issued September 7, 2007 Condition III.(A)(5)(c); Title 129, Chapter 8 Section 004.02].

(e) Testing results of waste material that is shipped off site per Condition III.(A)(4)(c)(iii) shall be kept on-site [Construction Permit CP07-0035 issued September 7, 2007 Condition III.(A)(5)(d); Title 129, Chapter 8 Section 004.02].

(f) The permittee shall record pressure drop, air downdraft operation (yes or no), and water circulation (yes or no) of the water wash system on Emission Units 7988 and 7989 (two Topcoat Booths), at least once per shift that the units are in operation, and routine, preventive, and corrective maintenance activities performed on the system. These records must be maintained to demonstrate compliance with Conditions III.(4)(d) and (4)(e) [Construction Permit CP07-0035 issued September 7, 2007 Condition III.(A)(5)(e); Title 129, Chapter 8 Section 004.02 and Chapter 20, Section 001].

(g) Filter replacement records shall be kept including the date the

filter replacement occurred and the type of filter installed. These records shall be maintained to demonstrate compliance with Conditions III.(4)(d) and (4)(f) [Construction Permit CP07-0035 issued September 7, 2007 Condition III.(A)(5)(f); Title 129, Chapter 8 Section 004.02 and Chapter 20, Section 001].

(h) The permittee shall keep records documenting the date, time, observations, and corrective actions taken for each day the associated fabric filter is in operation. These records must be maintained to demonstrate compliance with Conditions III.(4)(d) and (4)(f) [Construction Permit CP07-0035 issued September 7, 2007 Condition III.(A)(5)(g); Title 129, Chapter 8 Section 004.02 and Chapter 20, Section 001].

(i) The permittee shall comply with all applicable recordkeeping and reporting requirements in NESHAP Subpart MMMM for emission units 7961, 7962, 7962-T, 7966, 7969, 7970, 7971, 7975, 7982, 7986, 7988, 7989, 4814, 8907, 8908, 8919, 8920, 8921, and 8922 [Title 129, Chapter 28, Section 001.81]

(i) The recordkeeping requirement per NESHAP Subpart MMMM include the following:

1. Each record must be kept for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report or record [40 CFR 63.3931(b)].

2. A copy of each notification and report submitted pertaining to compliance with 40 CFR 63 Subpart MMMM [40 CFR 63.3930(a)].

3. A current copy of information provided by materials suppliers or manufacturers, such as manufacturer's formulation data, or test data used to determine the mass fraction of organic HAP and density for each coating, thinner and/or other additive, and cleaning material, and the volume fraction of coating solids for each coating [40 CFR 63.3930(b)].

4. If testing was conducted by CNH to determine mass fraction of organic HAP, density, or volume fraction of coating solids, the permittee must keep a copy of the test report [40 CFR 63.3930(b)].

5. If manufacturer information used was based on testing, the permittee must keep a copy of the summary sheet of results provided by the manufacturer [40 CFR 63.3930(b)].

6. For each compliance period, a record of each coating operation, time period, and the

compliance option used for each operation used [40 CFR 63.3930(c)(1)].

7. A record of the name and volume of each coating, thinner and/or other additive, and cleaning material used during each compliance period [40 CFR 63.3930(d)].

8. A record of the mass fraction of organic HAP for each coating, thinner and/or other additive, and cleaning material used during each 12-month period unless the material is tracked by weight [40 CFR 63.3930(e)].

9. A record of the volume fraction of coating solids for each coating used during each compliance period [40 CFR 63.3930(f)].

10. Records of the date, time, and duration of each deviation [40 CFR 63.3930(j)].

11. When the permittee uses the compliant method option, then the permittee must keep the following records for each compliance period:

    A. A record of the calculation of the organic HAP content for each coating [40 CFR 63.3930(c)(30)].

    B. The permittee may maintain purchase records for each material used rather than a record of the volume used [40 CFR 63.3930(d)].

12. When the permittee uses the emission rate without add-on controls option, the permittee must keep the following records for each compliance period:

    A. A record of the calculation of the total mass of organic HAP emissions for the coatings, thinners and/or other additives, and cleaning materials used each month then [40 CFR 63.3930(c)(3)].

    B. The calculation used to determine mass of organic HAP in waste materials then [40 CFR 63.3930(c)(3)].

    C. If the permittee uses an allowance for organic HAP contained in waste materials sent to or designated for shipment to a treatments, storage, and disposal facility (TDSF), then the permittee must also keep the following records [40 CFR 63.3930(h)]:

i. The name and address of each TSDF where the waste materials were sent;

ii. The date of each shipment;

iii. A statement of which Subparts under 40 CFR Parts 262, 264, 265, and 266 apply to the facility;

iv. The identification of the coating operation which produced waste materials included in each shipment, as well as, the month(s) in which it occurred;

v. The methodology used, in accordance with 40 CFR 63.3951(e)(4), to determine the following:

1) The total amount of waste materials sent to or the amount collected, stored, and designated for transport to a TSDF each month;

2) The mass of organic HAP contained in the waste materials;

3) Sources for all data used in the determination;

4) Methods used to generate the data;

5) Frequency of testing or monitoring; and

6) Supporting calculations and documentation, including the waste manifest for each shipment.

D. The calculation of the total volume of coating solids used each month then [40 CFR 63.3930(c)(3)].

E. The calculation of each 12-month organic HAP emission rate [40 CFR 63.3930(c)(3)].

F. The density for each coating, thinner and/or other additive, and cleaning material used during each rolling 12-month period [40 CFR 63.3930(g)].

(ii) The reporting requirement per NESHAP Subpart MMMM include the following:

1. The permittee must submit semiannual reports. The report for the first six (6 months) (January through June) shall be submitted by September 30 of each year. The report for the second six

(6) months (July through December) shall be submitted by March 31 of the following year [40 CFR 63.3920(a)(1) and §63.10(a)(7)]

2. The permittee must submit the following information semiannually (general requirements for semiannual reports):

   A. Identification of the compliance option(s) used for each coating operation during the reporting period [40 CFR 63.3920(a)(3)(iv)].

   B. If the permittee switched between compliance options during the reporting period, the beginning and ending dates for each option used [40 CFR 63.3920(a)(3)(iv)].

   C. If there were no deviations from the emission limitations, the permittee must include a statement that there were no deviations from the emission limitations during the reporting period [40 CFR 63.3920(a)(4)].

3. When the permittee uses the compliant material option, the permittee must submit a compliance report with the following information semiannually:

   A. If there were no deviations from the applicable emission limit, then the permittee shall submit a statement that the coating operation(s) were in compliance with the emission limitations during the reporting period because coatings, thinners and/or other additives, or cleaning materials were used that contained organic HAP which exceeded the applicable emission limit [40 CFR 63.3942(c)].

   B. If a deviation occurred during the reporting period, the permittee shall include the following with the semiannual report:

      i. Identification of each coating used that deviated from the applicable emission limit, and each thinner and/or other additive, and cleaning material used that contained organic HAP, and the dates and time periods each was used [40 CFR 63.3920(a)(5)(i)].

ii. The calculation of the organic HAP content for each coating [40 CFR 63.3920(a)(5)(ii) and 63.3910(c)(6)].

iii. The determination of mass fraction of organic HAP for each thinner and/or other additive, and cleaning material identified in paragraph (a)(5)(i) of this section. You do not need to submit background data supporting this calculation (*e.g.*, information provided by material suppliers or manufacturers, or test reports) [40 CFR 63.3920(a)(5)(iii)].

iv. A statement of the cause of each deviation [40 CFR 63.3920(a)(5)(iv)].

4. When the permittee uses the emission rate without add-on control option, the permittee must submit a compliance report with the following information semiannually:

A. The calculation results for each rolling 12-month organic HAP emission rate during the 6-month reporting period [40 CFR 63.3920(a)(3)(v)].

B. If there were no deviations from the emission limitations, the permittee must submit a statement that the coating operation(s) were in compliance with the emission limitations during the reporting period because the organic HAP emission rate for each compliance period was less than or equal to the applicable emission limit [40 CFR 63.3952(c)].

C. If a deviation occurred during the reporting period, the permittee shall include the following with the semiannual report:

i. The beginning and ending dates of each compliance period during which the 12-month organic HAP emission rate exceeded the applicable emission limit [40 CFR 63.3920(a)(6)(i)].

ii. The calculations used to determine the 12-month organic HAP emission rate for the compliance period in which the deviation occurred. The permittee not need to submit background data

supporting these calculations [40 CFR 63.3920(a)(6)(ii)].

iii. The calculation used to determine mass of organic HAP in waste materials according to §63.3951(e)(4). The permittee not need to submit background data supporting these calculations [40 CFR 63.3920(a)(6)(ii)]

iv. A statement of the cause of each deviation [40 CFR 63.3920(a)(6)(iii)].

## III. SPECIFIC CONDITIONS FOR AFFECTED EMISSION POINTS:

(B) Specific Conditions for External Combustion Units

(1) Permitted Emission Points:

The following table contains a description of emission points, control equipment, emission units, and relevant standards at the source at the time of permit issuance, in accordance with operating permit application #13R1-006, received February 6, 2013, including any supporting information received prior to issuance of this permit:

| Emission Point ID# | Control Equipment ID# and Description | Emission Unit Description | Relevant Standards |
|---|---|---|---|
| 2153 | - | Building 2 – Air Makeup Unit, 11.7 MMBtu/hr maximum capacity, natural gas fired, constructed in 1994. | None |
| 7956 | - | Index Line – boiler, 5.5 MMbtu/hr, natural gas fired, installed in August 2012. | NESHAP Subparts A and DDDDD |
| 7960 | - | Pretreatment Boiler, 12.5 MMBtu/hr maximum capacity, natural gas fired, constructed in 2004. | NSPS Subparts A and Dc; NESHAP Subparts A and DDDDD |
| 7965 | - | E-Coat Oven, 10.5 MMBtu/hr maximum capacity, natural gas fired, constructed in 2004. | None |
| 7972 | - | Topcoat Oven, 12.0 MMBtu/hr maximum capacity, natural gas fired, constructed in 2002. | None |
| 7988 | - | Topcoat Booth No. 1's Air Makeup Unit, 10.85 MMBtu/hr maximum capacity, natural gas fired, installed in 2004. | None |
| 7989 | - | Topcoat Booth No. 2's Air Makeup Unit, 10.85 MMBtu/hr maximum capacity, natural gas fired, installed in 2004. | None |
| 8909 | | Index Paint System – Dryoff Oven, 8.0 MMBtu/hr maximum capacity, natural gas fired, constructed in 2007. | None |
| 8910 | - | Index Paint System – Cure Oven, 14.0 MMBtu/hr maximum capacity, natural gas fired, constructed in 2007. | None |
| 8915 | - | Powder Coat Hot Water Boiler #1 (used unit), 8.4 MMBtu/hr maximum capacity, natural gas fired, installed in August 2008. | NESHAP Subparts A and DDDDD |
| 8916 | - | Powder Coat Hot Water Boiler #2, 5.0 MMBtu/hr maximum capacity, natural gas fired, installed in August 2009. | NESHAP Subparts A and DDDDD |

(2) Applicable NSPS and NESHAP Requirements

(a) Upon issuance of this permit, the source shall demonstrate compliance with all applicable NSPS Subpart A and Dc requirements for Emission Unit 7960 [Title 129, Chapter 18, Sections 001.01 and 001.52].

(b) At the time of permit issuance, there are no NSPS requirements

applicable to the Emission Units 2153, 7965, 7972, 7988, 7989, 8909, 8910, 8915, and 8916.

(c) At the time of permit issuance, there are no NESHAP requirements applicable to the Emission Units 2153, 7965, 7972, 7988, 7989, 8909, and 8910.

(d) Upon issuance of this permit, the source shall demonstrate compliance with all applicable NESHAP Subpart A and DDDDD requirements for Emission Units 7956, 7960, 8915, and 8916 [Title 129, Chapter 28, Sections 001.01 and 001.70].

(i) When allowed by NESHAP Subpart DDDDD, the source has flexibility to change compliance options for each emission unit during the term of this permit. When changing emission unit compliance options, the source shall notify the NDEQ, in writing, a minimum of 30 days prior to the change. The notification shall include the following: (Title 129, Chapter 8, Section 013)

1. The date of the change; and,

2. The new compliance option that has been chosen

(3) Emission Limitations and Testing Requirements:

(a) Pollutant emission rates from each emission point identified in the table below shall not exceed the permitted limits. Performance testing, if required, shall be conducted in accordance with Condition II.(D).

| Emission Point ID# | Pollutant | Permitted Limit | Averaging Period | Basis for Permit Limit | Performance Testing Required |
|---|---|---|---|---|---|
| 2153 | PM (filterable) | 6.77 lb/hr[1] | 1-hour | Title 129, Chapter 20, Section 002 | No |
| 7956 | PM (filterable) | 7.12 lb/hr[1] | 1-hour | Title 129, Chapter 20, Section 002 | No |
| 7960 | PM (filterable) | 7.12 lb/hr[1] | 1-hour | Title 129, Chapter 20, Section 002 | No |
| 7965 | PM (filterable) | 6.23 lb/hr[1] | 1-hour | Title 129, Chapter 20, Section 002 | No |
| 7972 | PM (filterable) | 6.90 lb/hr[1] | 1-hour | Title 129, Chapter 20, Section 002 | No |
| 7988 | PM (filterable) | 6.39 lb/hr[1] | 1-hour | Title 129, Chapter 20, Section 002 | No |
| 7989 | PM (filterable) | 6.39 lb/hr[1] | 1-hour | Title 129, Chapter 20, Section 002 | No |
| 8909 | PM (filterable) | 4.80 lb/hr[1] | 1-hour | Title 129, Chapter 20, Section 002 | No |
| 8910 | PM (filterable) | 7.77 lb/hr[1] | 1-hour | Title 129, Chapter 20, Section 002 | No |
| 8915 | PM (filterable) | 5.04 lb/hr[1] | 1-hour | Title 129, Chapter 20, Section 002 | No |

| Emission Point ID# | Pollutant | Permitted Limit | Averaging Period | Basis for Permit Limit | Performance Testing Required |
|---|---|---|---|---|---|
| 8916 | PM (filterable) | 3.00 lb/hr[1] | 1-hour | Title 129, Chapter 20, Section 002 | No |
| 2153, 7956, 7960, 7965, 7972, 7988, 7989, 8909, 8910, 8915, and 8916 | Opacity | <20 %, each unit[1] | 6-minutes | Title 129, Chapter 20, Section 004 | No |

[1] Compliance with Condition III.(B)(4)(b) demonstrates compliance with PM (filterable) and opacity limitations.

(4) Operational and Monitoring Requirements:

(a) Unit No. 7960 (12.5 MMBtu/hr boiler) shall be equipped with a dedicated, non-resettable fuel meter to record the daily fuel consumption. The fuel meter shall be calibrated at least annually. [Construction Permit CP07-0035 issued September 7, 2007, Condition III.(B)(3)(a); Title 129, Chapter 18, Section 001.52]

(b) Emission Units 2153, 7960, 7965, 7972, 7988, 7989, 8909, 8910, 8915, and 8916 shall combust natural gas only. [Construction Permit CP07-0035 issued September 7, 2007, Condition III.(B)(3)(b); Title 129, Chapter 8, Section 004.01C]

(c) The permittee shall comply with all applicable operational requirements in NSPS Subpart Dc for Emission Unit 7960 [Title 129, Chapter 18, Section 001.52].

(d) The permittee shall comply with all applicable operational requirements in NESHAP Subpart DDDDD for Emission Units 7956, 7960, 8915, and 8916 [Title 129, Chapter 28, Section 001.70].

(i) The permittee shall comply with the requirements for one time energy assessment and tune-ups [40 CFR 63.7540(a)].

1. Units 7956, 7960, and 8915 (existing boilers) require an energy assessment in accordance with Table 3 of NESHAP Subpart DDDDD by January 31, 2016 [40 CFR 63.7495(b)]

2. The frequency of the tune-ups of boilers include the following [NESHAP Subpart DDDDD Table 3; 40 CFR 63.7540(a)(10), (11) and (12); 40 CFR 63.7500(e); 40 CFR 63.7510(e); and 40 CFR 63.7495(b)]:

| Unit # | Frequency of tune-ups |
|---|---|
| 7960 | Annually |
| 7956 | Biennially |
| 8915 | Biennially |
| 8916 | Every 5 years |

3. The permittee shall conduct the tune-up in accordance with 40 CFR 63.7540(a)(10)(i)-(iv).

(5) Recordkeeping and Reporting Requirements:

(a) The permittee shall comply with all applicable recordkeeping and reporting requirements in NSPS Subparts A and Dc for Emission Unit 7960 to include the following: [Construction Permit CP07-0035 issued September 7, 2007, Condition III.(B)(5)(a) and (b); Title 129, Chapter 18, Sections 001.01 and 001.52]

(i) Notifications and record keeping as required by 40 CFR 60.7.

(ii) Reporting and recordkeeping as required by 40 CFR 60.48c.

(b) The permittee shall comply with all applicable recordkeeping and reporting requirements in NESHAP Subparts A and DDDDD for Emission Units 7956, 7960, 8915, and 8916 to include the following: [Construction Permit CP07-0035 issued September 7, 2007, Condition III.(B)(5)(c); Title 129, Chapter 28, Sections 001.01 and 001.70]

(i) Notifications as required by 40 CFR 63.7506(b) and 40 CFR 63.9(b).

1. The recordkeeping requirement per NESHAP Subpart DDDDD include the following:

A. The permittee must keep a copy of each notification and report submitted to comply with NESHAP Subpart DDDDD, including all documentation supporting any Initial Notification or Notification of Compliance Status or annual, biennial, or 5-year compliance report submitted, according to the requirements of §63.10(b)(2)(xiv) [40 CFR 63.7555(a)].

2. The reporting requirement per NESHAP Subpart DDDDD include the following:

A. The permittee shall submit annual, biennial, and/or 5-year compliance reports as set forth in the following table. Each compliance report must be postmarked or submitted no later than March 31 [40 CFR 63.7550(b) and 40 CFR 60(a)(7)].

| **Required Reporting Frequency** | |
|---|---|
| **Unit #** | **Compliance Report Frequency** |
| 7960 | Annually |
| 7956 | Biennially |
| 8915 | Biennially |

| Required Reporting Frequency | |
|---|---|
| **Unit #** | **Compliance Report Frequency** |
| 8916 | Every 5 years |

B. Each compliance report submitted must include the following [40 CFR 63.7550(c)(1)];

i. Company and Facility name and address [40 CFR 63.7550(c)(5)(i)].

ii. Process unit information, emissions limitations, and operating parameter limitations [40 CFR 63.7550(c)(5)(ii)].

iii. Date of report and beginning and ending dates of the reporting period [40 CFR 63.7550(c)(5)(iii)].

iv. Date of the most recent tune-up for each unit subject to only the requirement to conduct an annual, biennial, or 5-year tune-up according to §63.7540(a)(10), (11), or (12) respectively. Include the date of the most recent burner inspection if it was not done annually, biennially, or on a 5-year period and was delayed until the next scheduled or unscheduled unit shutdown [40 CFR 63.7550(c)(5)(xiv)].

v. Statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report [40 CFR 63.7550(c)(5)(xvii)].

C. The permittee must submit all reports required by NESHAP Subpart DDDDD electronically to the EPA via the CEDRI. (CEDRI can be accessed through the EPA's CDX.) The permittee must use the appropriate electronic report in CEDRI for this subpart. Instead of using the electronic report in CEDRI for this subpart, you may submit an alternate electronic file consistent with the XML schema listed on the CEDRI Web site (*http://www.epa.gov/ttn/chief/cedri/index.html*), once the XML schema is available. If the reporting form specific to this subpart is not available in CEDRI at the time that the report is due, you must submit the report to the Administrator at the appropriate address

listed in §63.13. You must begin submitting reports via CEDRI no later than 90 days after the form becomes available in CEDRI [40 CFR 63.7550(h)(3)].

(c) The permittee shall maintain records documenting the type of fuel to document compliance with Condition III.(B)(4)(b) [Title 129, Chapter 8, Section 004.02A].

## III. SPECIFIC CONDITIONS FOR AFFECTED EMISSION POINTS:

(C) Specific Conditions for Burn Off Ovens

(1) Permitted Emission Points:

The following table contains a description of emission points, control equipment, emission units, and relevant standards at the source at the time of permit issuance, in accordance with operating permit application #13R1-006, received February 6, 2013, including any supporting information received prior to issuance of this permit:

| Emission Point ID# | Control Equipment ID# and Description | Emission Unit Description | Relevant Standards |
|---|---|---|---|
| 8912 | Integrated Afterburner | Burn-Off Oven, modular starved air, 300 lb maximum capacity, 20 lb/hr maximum design burn capacity, 0.8 MMBtu/hr maximum capacity of fuel use, natural gas fired, installed March 2009. | None |
| 8914 | Afterburner | Burn-Off oven – Steelman Industries, pyrolysis incinerator, 300 lbs maximum capacity, 75 lbs/hr maximum design burn rate, 2.05 MMBtu/hr maximum capacity of fuel use, natural gas fired, installed January 30, 2012. | None |
| 8933 | Afterburner | Burn-Off Oven, 300 lbs maximum capacity, 75 lb/hr maximum design burn capacity, 2.05 MMBtu/hr maximum capacity of fuel use, natural gas fired, installed June 17, 2013. | None |

(2) Applicable NSPS and NESHAP Requirements

At the time of permit issuance, there are no NSPS or NESHAP requirements applicable to the emission units listed in Condition III.(C)(1).

(3) Emission Limitations and Testing Requirements:

(a) Pollutant emission rates from each emission point identified in the table below shall not exceed the permitted limits. Performance testing, if required, shall be conducted in accordance with Condition II.(D).

| Emission Point ID# | Pollutant | Permitted Limit | Averaging Period | Basis for Permit Limit | Performance Testing Required |
|---|---|---|---|---|---|
| 8912 | PM (filterable) | 0.10 gr/dscf of exhaust gas, corrected to 7% oxygen[1] | Test Method Average | Construction Permit #CP07-0035 issued September 7, 2007, Condition III.(C)(2)(a); Title 129, Chapter 22, Section 002 | No |

| Emission Point ID# | Pollutant | Permitted Limit | Averaging Period | Basis for Permit Limit | Performance Testing Required |
|---|---|---|---|---|---|
| 8914 and 8933 | PM (filterable) | 0.10 gr/dscf of exhaust gas, corrected to 7% oxygen, each unit[1] | Test Method Average | Construction Permit #CP11-032 issued December 20, 2011, Condition III.(A)(2)(a); Title 129, Chapter 22, Section 002 | No |
| 8912, 8914 and 8933 | Opacity | <20 %, each unit[1] | 6-minute | Title 129, Chapter 20, Section 004 | No |

[1] Compliance with Condition III.(C)(4)(a) and (c) demonstrates compliance with PM (filterable) and opacity limitations.

(4) Operational and Monitoring Requirements:

(a) The burn-off ovens shall be properly installed, maintained, and operated at all times in accordance with manufacturer's instructions or facility's operational and maintenance plan, including the proper operation and maintenance of the afterburners to control emissions. The facility's operational and maintenance plan, if applicable, shall be available within 30 days of startup of the burn-off ovens. Instructions for proper operation of the burn-off ovens, which include the terms and conditions of this permit, shall be posted on-site. [Construction Permit #CP07-0035 issued September 7, 2007, Condition III.(C)(3)(a); Construction Permit #CP11-032 issued December 20, 2011, Condition III.(A)(3)(a); and Title 129, Chapter 22, Sections 005 and 006]

(b) The materials burned in the burn-off ovens shall be limited to coatings on metal parts and paint line fixtures (racks, grates and hooks). [Construction Permit #CP07-0035 issued September 7, 2007, Condition III.(C)(3)(b); Construction Permit #CP11-032 issued December 20, 2011, Condition III.(A)(3)(b); Title 129, Chapter 22, Sections 002 and 004]

(c) The permittee shall conduct the following visible emissions surveys for emission points 8912, 8914 and 8933 [Title 129, Chapter 8, Sections 004.01B and 013; Chapter 20, Section 004]:

(i) A source representative trained EPA Test Method 9 shall conduct visible emissions surveys in accordance with Method 9 for each emission point 8912, 8914 and 8933 on a daily basis while each emission unit is in operation. For this condition, "Trained in EPA Test Method 9" shall mean someone who has participated in the classroom and field observation exercises at least once in the last 5 years, and has received Method 9 certification at least once in the last 5 years.

(ii) For each emission point with observed visible emissions equal to or exceeding 20% opacity during the visible

emissions survey required above, the source representative shall proceed with appropriate corrective action and conduct an additional visible emissions survey in accordance with Method 9 after completion of the corrective action.

(5) Recordkeeping and Reporting Requirements:

(a) The permittee shall keep the following records to demonstrate compliance with Condition III.(C)(4)(a): [Construction Permit #CP07-0035 issued September 7, 2007, Condition III.(C)(5)(a); Construction Permit #CP11-032 issued December 20, 2011, Condition III.(A)(5)(a); Title 129, Chapter 22, Section 005]

(i) Written certification that each burn-off oven was installed per the manufacturers' recommendations and requirements.

(ii) Records showing when routine inspection and maintenance were performed and what, if any, corrective actions or repairs were completed.

(iii) Written certification that the burn-off oven operator has read and understands the instructions for proper operation of the unit, which includes the terms and conditions of this permit; and intends to comply with the burn-off oven operating instructions.

(b) The permittee shall keep the following records to demonstrate compliance with Condition III.(C)(4)(b), records of the type of materials burned during each charge in each burn-off oven. [Construction Permit #CP07-0035 issued September 7, 2007, Condition III.(C)(5)(b); Construction Permit #CP11-032 issued December 20, 2011, Condition III.(A)(5)(b); Title 129, Chapter 22, Sections 002 and 004]

(c) The permittee shall keep the following visible emissions surveys conducted on emission points 8912, 8914 and 8933 [Title 129, Chapter 8, Section 004.02]:

(i) The permittee shall keep records of each person trained in EPA Test Method 9 on-site for a minimum of 5 years.

(ii) The results of each visible emissions survey shall be recorded in a log, which shall include, at a minimum, the following items:

1. All emission points from which visible emissions occurred (except for water vapor).

2. The opacity of emissions in increments of 5%.

3. Emission points for which the emission units were not in operation during the survey.

4. Each entry shall be dated and initialed by the person taking the opacity readings.

(ii) To document compliance with Condition III. (B)(4)(C), if observed opacity equals or exceeds 20%, the permittee shall record the following:

1. The cause of the emissions;
2. The corrective action taken; and,
3. Opacity readings, in increments of 5%, following corrective action.

## III. SPECIFIC CONDITIONS FOR AFFECTED EMISSION POINTS:

(D) Specific Conditions for Reciprocating Internal Combustion Engines

(1) Permitted Emission Points:

The following table contains a description of emission points, control equipment, emission units, and relevant standards at the source at the time of permit issuance, in accordance with operating permit application #13R1-006, received February 6, 2013, including any supporting information received prior to issuance of this permit:

| Emission Point ID# | Control Equipment ID# and Description | Emission Unit Description | Relevant Standards |
|---|---|---|---|
| 2081 | None | Emergency generator: Generator: Onan 30 KW, 37.5 kVa, Model 1562D, S/N 0372432647; Engine: Ford Motor, 6 cylinder Inline 05123 B-22-HB, Engine displacement of 240, 0.36 MMBtu/hr maximum capacity, maximum displacement of 0.7 Liters/cylinder, propane fired, spark ignition reciprocating internal combustion engine (SI RICE), installed in 1997, located in Shipping Building | NESHAP Subparts A and ZZZZ |
| 2082 | None | Emergency generator: Milbank, Model: MG3520831WIN, 35 kW, 120/208, 64 hp, maximum displacement of 1.85 liters/cylinder, 6 cylinders, natural gas fired, SI RICE, 4-stroke rich burn, manufactured in 2014, installed in 2014, located in Front Office. | NSPS Subparts A and JJJJ; and NESHAP Subparts A and ZZZZ |
| 2111 | None | Emergency generator: Milbank, Model: MG120480310S, 190 hp, 1.26 MMBtu/hr maximum capacity, natural gas fired, SI RICE, 4-stroke rich burn, manufactured 2015, installed July 2015, located above paint office. | NSPS Subparts A and JJJJ; and NESHAP Subparts A and ZZZZ |
| 2328 | None | Emergency generator: Generator: Cummins Power Generation, Model 35GGFD-5813223, S/N C07003739; Engine: Ford Motor, 6 cylinder 5C 722 AB 4.2L Windsor Canada 2007 Model ESG642, S/N 07XK64378, 0.09 MMBtu/hr maximum capacity, natural gas fired, spark ignition reciprocating internal combustion engine (SI RICE), 4-stroke rich burn; manufactured March 28, 2007, installed December 2007; located in the Hay Tools Addition. | NESHAP Subparts A and ZZZZ |

(2) Applicable NSPS and NESHAP Requirements

(a) At the time of permit issuance, there are no NSPS requirements applicable to the emission units 2081 and 2328.

(b) Upon issuance of this permit, the source shall demonstrate compliance with all applicable NSPS Subparts A and JJJJ requirements for emission units 2082 and 2111 [Title 129, Chapter 18, Sections 001.01 and 001.82].

(i) When allowed by NSPS Subpart JJJJ, the source has flexibility to change compliance options for each emission unit during the term of this permit. When changing emission unit compliance options, the source shall notify the NDEQ, in writing, a minimum of 30 days prior to the change. The notification shall include the following: (Title 129, Chapter 8, Section 013 and 015)

1. The date of the change; and,

2. The new compliance option that has been chosen

(c) Upon issuance of this permit, the source shall demonstrate compliance with all applicable NESHAP Subpart A and ZZZZ requirements for emission units 2081, 2082, 2111, and 2328 [Title 129, Chapter 28, Sections 001.01 and 001.88].

(i) When allowed by NESHAP Subpart ZZZZ, the source has flexibility to change compliance options for each emission unit during the term of this permit. When changing emission unit compliance options, the source shall notify the NDEQ, in writing, a minimum of 30 days prior to the change. The notification shall include the following: (Title 129, Chapter 8, Section 013 )

1. The date of the change; and,

2. The new compliance option that has been chosen

(3) Emission Limitations and Testing Requirements:

(a) Pollutant emission rates from each emission point identified in the table below shall not exceed the permitted limits. Performance testing, if required, shall be conducted in accordance with Condition II.(D).

| Emission Point ID# | Pollutant | Permitted Limit | Averaging Period | Basis for Permit Limit | Performance Testing Required |
|---|---|---|---|---|---|
| 2081 | PM (filterable) | 0.22 lb/hr[2] | 1-hour | Title 129, Chapter 20, Section 002 | No |
| 2082 | $NO_x$ + HC | 10 g/hp-hr[1] | Test Method Average | Title 129, Chapter 18, Section 001.82; NSPS Subpart JJJJ, §60.4233(d) and Table 1 | No |
| | CO | 387 g/hp-hr[1] | Test Method Average | | No |

| Emission Point ID# | Pollutant | Permitted Limit | Averaging Period | Basis for Permit Limit | Performance Testing Required |
|---|---|---|---|---|---|
| 2082 | PM (filterable) | 0.27 lb/hr[2] | 1-hour | Title 129, Chapter 20, Section 002 | No |
| 2111 | $NO_x$ | 2.0 g/hp-hr[1] | Test Method Average | Title 129, Chapter 18, Section 001.82; NSPS Subpart JJJJ, §60.4233(e) and Table 1 | No |
| | CO | 4.0 g/hp-hr[1] | Test Method Average | | No |
| | VOC | 1.0 g/hp-hr[1] | Test Method Average | | No |
| | PM (filterable) | 0.76 lb/hr[1] | 1-hour | Title 129, Chapter 20, Section 002 | No |
| 2328 | PM (filterable) | 0.05 lb/hr[2] | 1-hour | Title 129, Chapter 20, Section 002 | No |
| 2081, 2082, 2111, 2328 | Opacity | <20%, each unit[2] | 6-minutes | Title 129, Chapter 20, Section 004 | No |

[1] Compliance with Condition III.(D)(4)(a) and (4)(b) demonstrates compliance with $NO_x$, CO, $NO_x$+HC, and VOC.
[2] Compliance with Condition III.(D)(4)(c) demonstrates compliance with PM (filterable) and Opacity limitations.

(b) The permittee shall comply with all applicable emission limitations in NSPS Subpart JJJJ for emission units 2082 and 2111 [Title 129, Chapter 18 Section 001.82].

(4) Operational and Monitoring Requirements:

(a) The permittee shall comply with all applicable operational and monitoring requirements in NESHAP Subpart ZZZZ for emission units 2081, 2082, 2111, and 2328 [Title 129, Chapter 28, Section 001.88].

(i) The NSPS Subpart JJJJ operational and monitoring requirements for emission units 2082 and 2111 demonstrates compliance with the NESHAP Subpart ZZZZ operational and monitoring requirements for emission units 2082 and 2111 [40 CFR 63.6590(c)(6)].

(ii) The work practices standards per NESHAP Subpart ZZZZ include the following [40 CFR 63.6602]:

1. The permittee must meet the following requirements for emergency stationary SI RICE (Units 2081 and 2328) [NESHAP Subpart ZZZZ, Table 2c, Item 6]

A. Change oil and filter every 500 hours of operation or annually, whichever comes first, or utilize an oil analysis program pursuant to 40 CFR 63.6625(j) to extend the specified oil change requirements.

B. Inspect spark plugs every 1,000 hours of operation or annually, whichever comes first, and replace as necessary; and

C. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.

2. If an emergency engine is operating during an emergency and it is not possible to shut down the engine in order to perform the work practice requirements on the schedule required in NESHAP Subpart ZZZZ Table 2c, or if performing the work practice on the required schedule would otherwise pose an unacceptable risk under federal, state, or local law, the work practice can be delayed until the emergency is over or the unacceptable risk under federal, state, or local law has abated. The work practice should be performed as soon as practicable after the emergency has ended or the unacceptable risk under federal, state, or local law has abated. Sources must report any failure to perform the work practice on the schedule required and the federal, state or local law under which the risk was deemed unacceptable [NESHAP Subpart ZZZZ, Table 2c, footnote 1].

(iii) The permittee of an existing emergency stationary RICE with a site rating of less than or equal to 500 HP located at a major source of HAP emissions must operate and maintain the stationary RICE and after-treatment control device (if any) according to the manufacturer's emission-related written instructions or develop your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions [40 CFR 63.6625(e) and (e)(2), §63.6640(a)].

(iv) The permittee of an existing emergency stationary RICE with a site rating of less than or equal to 500 HP located at a major source of HAP emissions must install a non-resettable hour meter [40 CFR 63.6625(f)].

(v) The permittee may not operate the emergency RICE more than 100 hours per calendar year for non-emergency use, including maintenance checks and readiness testing. Up to 50 hours of this 100 hour limit may be used for other allowed non-emergency operations defined in §63.6640(f) [40 CFR 63.6640(f)]

(b) The permittee shall comply with all applicable operational and monitoring requirements in NSPS Subpart JJJJ for emission units 2082 and 2111. The operational and monitoring requirements for NSPS Subpart JJJJ include the following [Title 129, Chapter 18, Section 001.82]:

(i) Owners or operators of a stationary SI ICE must operate and maintain stationary SI ICE that achieve the emission standards as required in §60.4233 over the entire life of the engine [40 CFR 60.4234].

(ii) Owners or operators of a stationary SI internal combustion engine that is manufactured after July 1, 2008, and must comply with the emission standards specified in §60.4233(a) through (c), by purchasing an engine certified to the emission standards in §60.4231(a) through (c), as applicable, for the same engine class and maximum engine power. In addition, you must meet one of the requirements specified in §60.4243(a)(1) and (2) [40 CFR 60.4243(a)]

1. If you operate and maintain the certified stationary SI internal combustion engine and control device according to the manufacturer's emission-related written instructions, you must keep records of conducted maintenance to demonstrate compliance, but no performance testing is required if you are an owner or operator. You must also meet the requirements as specified in 40 CFR part 1068, subparts A through D, as they apply to you. If you adjust engine settings according to and consistent with the manufacturer's instructions, your stationary SI internal combustion engine will not be considered out of compliance [40 CFR 60.4243(a)(1)].

2. If you do not operate and maintain the certified stationary SI internal combustion engine and control device according to the manufacturer's emission-related written instructions, your engine will be considered a non-certified engine, and you must demonstrate compliance according to §60.4243(a)(2)(i) through (iii) of this section, as appropriate [40 CFR 60.4243(a)(2)].

A. If you are an owner or operator of a stationary SI internal combustion engine less than 100 HP, you must keep a maintenance plan and records of conducted maintenance to demonstrate compliance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions, but no performance testing is required if you are an owner or operator [40 CFR 60.4243(a)(2)(i)].

B. If you are an owner or operator of a stationary SI internal combustion engine

greater than or equal to 100 HP and less than or equal to 500 HP, you must keep a maintenance plan and records of conducted maintenance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, you must conduct an initial performance test within 1 year of engine startup to demonstrate compliance [40 CFR 60.4243(a)(2)(ii)].

(iii) Owners or operators of a stationary SI internal combustion engine and must comply with the emission standards specified in §60.4233(d) or (e), you must demonstrate compliance according to one of the methods specified §60.4243(b)(1) and (2) [40 CFR 60.4243(b)].

1. Purchasing an engine certified according to procedures specified in NSPS Subpart JJJJ, for the same model year and demonstrating compliance according to one of the methods specified in §60.4243(a) [40 CFR 60.4243(b)(1)].

2. Purchasing a non-certified engine and demonstrating compliance with the emission standards specified in §60.4233(d) or (e) and according to the requirements specified in §60.4244, as applicable, and according to §60.4243(b)(2)(i) and (ii) [40 CFR 60.4243(b)(2)].

(iv) Owners and operators of an emergency stationary ICE must operate the emergency stationary ICE according to the requirements in §60.4243(d)(1) through (3). In order for the engine to be considered an emergency stationary ICE under this subpart, any operation other than emergency operation, maintenance and testing, emergency demand response, and operation in non-emergency situations for 50 hours per year, as described in §60.4243(d)(1) through (3), is prohibited. If you do not operate the engine according to the requirements in §60.4243(d)(1) through (3), the engine will not be considered an emergency engine under this subpart and must meet all requirements for non-emergency engines [40 CFR 60.4243(d)].

1. There is no time limit on the use of emergency stationary ICE in emergency situations [40 CFR 60.4243(d)(1)].

2. You may operate your emergency stationary ICE for any combination of the purposes specified in §60.4243(d)(2)(i) for a maximum

of 100 hours per calendar year. [40 CFR 60.4243(d)(2)].

A. Emergency stationary ICE may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of emergency ICE beyond 100 hours per calendar year.

3. Emergency stationary ICE may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing and emergency demand response provided in §60.4243(d)(2).

(c) Emission unit 2081 shall combust propane only. Emission units 2082, 2111, and 2328 shall combust natural gas only [Title 129, Chapter 8, Section 004.01C].

(5) Recordkeeping and Reporting Requirements:

(a) The permittee shall comply with all applicable recordkeeping and reporting requirements in NESHAP Subpart ZZZZ for emission units 2081, 2082, and 2111, and 2328. [Title 129, Chapter 28, Section 001.88].

(i) The NSPS Subpart JJJJ recordkeeping and reporting requirements for emission units 2082 and 2111 demonstrates compliance with the NESHAP Subpart ZZZZ recordkeeping and reporting requirements for emission units 2082 and 2111 [40 CFR 63.6590(c)(6)].

(ii) The recordkeeping requirement per NESHAP Subpart ZZZZ (for Units 2081 and 2328) include the following:

1. The permittee must keep records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment [40 CFR 63.6655(a)(2)].

2. The permittee must keep records of actions taken during periods of malfunction to minimize emissions in accordance with §63.6605(b), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal manner of operation [40 CFR 63.6655(a)(5)].

3. The permittee must keep the records required in Table 6 of NESHAP Subpart ZZZZ to show continuous compliance with each emission or operating limitation that applies to the permittee [40 CFR 63.6655(d)].

   A. Operating and maintaining the stationary RICE according to the manufacturer's emission-related operation and maintenance instructions [NESHAP Subpart ZZZZ, Table 6, Item 9]; or

   B. Develop and follow your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions [NESHAP Subpart ZZZZ, Table 6, Item 9].

4. The permittee must keep records of the maintenance conducted on the emergency stationary RICE in order to demonstrate that permittee operated and maintained the stationary RICE and after-treatment control device (if any) according to the permittee's maintenance plan [40 CFR 63.6655(e) and (e)(2)].

5. The permittee must keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. The permittee must document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation. [40 CFR 63.6655(f) and (f)(1)].

6. The permittee must keep each record readily accessible for expeditious review in hard copy or electronic form for at least 5 years after the date of each occurrence, maintenance, corrective action, report, or record [40 CFR 63.6660(a), (b), and (c)].

(b) The permittee shall comply with all applicable recordkeeping and reporting requirements in NSPS Subpart JJJJ for emission units 2082 and 2111 [Title 129, Chapter 18, Section 001.82].

(i) Owners and operators of all stationary SI ICE must keep records of the information in §60.4245 (a)(1) through (4) [40 CFR 60.4245(a)].

1. All notifications submitted to comply with this subpart and all documentation supporting any notification.
2. Maintenance conducted on the engine.
3. If the stationary SI internal combustion engine is a certified engine, documentation from the manufacturer that the engine is certified to meet the emission standards and information as required in 40 CFR parts 90, 1048, 1054, and 1060, as applicable.
4. If the stationary SI internal combustion engine is not a certified engine or is a certified engine operating in a non-certified manner and subject to §60.4243(a)(2), documentation that the engine meets the emission standards.

(ii) Owners and operators of stationary SI ICE that are subject to performance testing must submit a copy of each performance test as conducted in §60.4244 within 60 days after the test has been completed [40 CFR 60.4245(d)].

(c) The permittee shall maintain records documenting the type of fuel to document compliance with Condition III.(D)(4)(c) [Title 129, Chapter 8, Section 004.02A].

## III. SPECIFIC CONDITIONS FOR AFFECTED EMISSION POINTS:

(E) Specific Conditions for Insignificant Activities:

(1) The following table contains a description of insignificant activities at the source at the time of permit issuance, in accordance with operating permit application #13R1-006, received February 6, 2013, including any supporting information received prior to issuance of this permit:

| Equipment ID | Unit Description[1] | Insignificance Criteria |
|---|---|---|
| 2106 | Air Make-Up Unit, 1.05 MMBtu/hr maximum capacity, natural gas fired, located in the burn-off oven vestibule, installed in 2012. | < 10 MMBtu/hr heat input |
| 2014-2017, 2022, 2024 | Air Makeup Units, six units, 6.3 MMBtu/hr each, natural gas fired | < 10 MMBtu/hr heat input |
| 2105 | Boiler Room - 0.05 MMBtu/hr heater, natural gas fired, used for comfort heat | < 10 MMBtu/hr heat input |
| N/A | Building 2 - Four radiant heaters, 0.15 MMBtu/hr each, natural gas fired | < 10 MMBtu/hr heat input |
| 2186 | Building 2 SE – 5.3 MMBtu/hr Air Makeup Unit, natural gas fired, used for comfort heat | < 10 MMBtu/hr heat input |
| 2191 | Building 3 E Center – 5.3 MMBtu/hr Air Makeup Unit, natural gas fired, used for comfort heat | < 10 MMBtu/hr heat input |
| 2190 | Building 3 North – 5.3 MMBtu/hr Air Makeup Unit, natural gas fired, used for comfort heat | < 10 MMBtu/hr heat input |
| 2187 | Builidng 4 E – 5.3 MMBtu/hr Air Makeup Unit, natural gas fired, used for comfort heat | < 10 MMBtu/hr heat input |
| N/A | Building 5- Two radiant heaters, 0.25 MMBtu/hr each, natural gas fired | < 10 MMBtu/hr heat input |
| N/A | Building 5- Six radiant heaters, 0.2 MMBtu/hr each, natural gas fired | < 10 MMBtu/hr heat input |
| 2138 | Building 5 – 2.9 MMBtu/hr Air Makeup Unit, natural gas fired, used for comfort heat | < 10 MMBtu/hr heat input |
| 2144 | Building 5 – 5.9 MMBtu/hr Air Makeup Unit, natural gas fired, used for comfort heat | < 10 MMBtu/hr heat input |
| 2189 | Building 5 Center – 5.3 MMBtu/hr Air Makeup Unit, natural gas fired, used for comfort heat | < 10 MMBtu/hr heat input |
| 2188 | Building 5 E – 5.3 MMBtu/hr Air Makeup Unit, natural gas fired, used for comfort heat | < 10 MMBtu/hr heat input |
| 2137 | Building 6 – 2.9 MMBtu/hr Air Makeup Unit, natural gas fired, used for comfort heat | < 10 MMBtu/hr heat input |
| N/A | Building 6 - 0.2 MMBtu/hr radiant heater, natural gas fired | < 10 MMBtu/hr heat input |
| 2227 | Building 6 – 2.05 MMBtu/hr Air Makeup Unit, natural gas fired | < 10 MMBtu/hr heat input |

| Equipment ID | Unit Description[1] | Insignificance Criteria |
|---|---|---|
| 2228 | Building 6 – 2.05 MMBtu/hr Air Makeup Unit, natural gas fired | < 10 MMBtu/hr heat input |
| 2011 | Building 6 North - 2.5 MMBtu/hr heater, natural gas fired, used for comfort heat | < 10 MMBtu/hr heat input |
| 2219 | Building 8 – 3.3 MMBtu/hr Air Makeup Unit, natural gas fired | < 10 MMBtu/hr heat input |
| 2104 | Door 19 - 0.05 MMBtu/hr heater, natural gas fired | < 10 MMBtu/hr heat input |
| 6319, 6320, and 6321 | Hay Equipment Manufacturing Building– Three Air Makeup Units, 4.93 MMBtu/hr each, natural gas fired, used for comfort heat | < 10 MMBtu/hr heat input |
| N/A | Hay Equipment Manufacturing Building – Four radiant heater burners, 0.24 MMBtu/hr each, natural gas fired | < 10 MMBtu/hr heat input |
| N/A | Hay Equipment Manufacturing Building – 0.36 MMBtu/hr Rooftop Air Makeup Unit, natural gas fired | < 10 MMBtu/hr heat input |
| N/A | Loading Rack – tube heaters, consisting of two 0.2 MMBtu/hr burners, natural gas fired. | < 10 MMBtu/hr heat input |
| 7926 | Mix Room - 0.1 MMBtu/hr heater, natural gas fired, used for comfort heat | < 10 MMBtu/hr heat input |
| N/A | Office – 0.15 MMBtu/hr roof top heater, natural gas fired | < 10 MMBtu/hr heat input |
| N/A | Office – 0.18 MMBtu/hr roof top heater, natural gas fired | < 10 MMBtu/hr heat input |
| N/A | Office – 0.4 MMBtu/hr roof top heater, natural gas fired | < 10 MMBtu/hr heat input |
| 2141 | Office – 1.50 MMBtu/hr boiler (hot water heater), natural gas fired, used for comfort heat, installed in November 2015. | < 10 MMBtu/hr heat input |
| 2327 | Powder Coat Environmental Room – 0.5 MMBtu/hr Air Makeup Unit, natural gas fired, used for comfort heat | < 10 MMBtu/hr heat input |
| N/A | Powder Coat Environmental Room – 2.592 MMBtu/hr Air Makeup Unit, natural gas fired, used for comfort heat | < 10 MMBtu/hr heat input |
| N/A | Shipping Building – Two radiant heaters, 0.25 MMBtu/hr each, natural gas combustion | < 10 MMBtu/hr heat input |
| N/A | Shipping Building – Six radiant heaters, 0.2 MMBtu/hr each, natural gas combustion | < 10 MMBtu/hr heat input |
| N/A | Small Parts Building – Six radiant heaters, 0.2 MMBtu/hr each, natural gas fired | < 10 MMBtu/hr heat input |
| 4814 | Strip Tank – 0.5 MMBtu/hr heater, natural gas fired. | < 10 MMBtu/hr heat input |
| 8917 | 3.0 MMBtu/hr Powder Coat Dryoff Oven, natural gas fired | < 10 MMBtu/hr heat input |

| Equipment ID | Unit Description[1] | Insignificance Criteria |
|---|---|---|
| 8918 | 8.0 MMBtu/hr Cure Oven (two burners at 4 MMBtu/hr each) | < 10 MMBtu/hr heat input |
| N/A | Two solvent recovery units, installed in 2014 | HAP emissions less than reporting levels in Title 129 Appendixes II and III |
| 00T2 | 10,000 gallon capacity storage tank, storing Diesel Fuel | Vapor pressure < 0.5 psia; < 1 million gallons throughput |
| 00T4 | 10,000 gallon capacity storage tank, storing ethylene glycol | HAP emissions less than reporting levels in Title 129 Appendixes II and III |
| N/A | Welders (219) – source wide | Welding operations with HAP emissions less than reporting levels in Title 129 Appendixes II and III |
| N/A | Laser cutters – source wide | Laser cutting operations with HAP emissions less than reporting levels in Title 129 Appendixes II and III |
| N/A | Grinders (15) – source wide | Grinding operations with HAP emissions less than reporting levels in Title 129 Appendixes II and III |
| 00NP1 | Plant Wide Maintenance Parts Washer | HAP emissions less than reporting levels in Title 129 Appendixes II and III |

[1] All emission units were constructed after February 26, 1974.

(2) Emission Limitations:

Each insignificant activity shall not exceed the permitted limits identified in the following table (Title 129, Chapter 7, Section 006.04).

| Insignificant Activity ID# | Pollutant | Permitted Limit | Averaging Period | Basis for Permit Limit | Performance Testing Required |
|---|---|---|---|---|---|
| Source-Wide Welders, Laser-Cutters, and Grinders | PM (filterable) | Limits per Chapter 20, Section 001 | Three 1-hour periods | Title 129, Chapter 20, Section 001 | No |
| All combustion units identified in Condition III.(E)(1) | PM (filterable) | 0.6 lb/MMBtu for each unit | Three 1-hour periods | Title 129, Chapter 20, Section 002 | No |
| All units identified in Condition III.(E)(1) | Opacity | < 20 percent for each unit | 6 minutes | Title 129, Chapter 20, Section 004 | No |

(3) Operational and Monitoring Requirements:

The insignificant activities identified in Condition III.(E)(1) are exempt from operational and monitoring requirements (Title 129, Chapter 7, Section 006.04 and Chapter 8, Section 004.01B).

(4) Recordkeeping and Reporting Requirements:

A contemporaneous written notification shall be made to the NDEQ if there are additions, or changes, to the list of insignificant activities in Specific Condition III.(E)(1) (insignificant activities are as defined in Operating Permit Application Forms). Notification is only required for those insignificant activities that must be included in an application. The notification shall include the following (Title 129, Chapter 8, Section 013):

(a) A brief description of the addition or change within the permitted source;

(b) The date on which the addition or change will occur;

(c) Any change in emissions; and,

(d) The criteria, as defined in the Operating Permit Application Forms, used to determine that the addition or change to the list of insignificant activities qualifies as insignificant.

**FACT SHEET FOR PERMIT NUMBER: OP13R1-006** **DATE: August 18, 2016**

**NDEQ ID:** 24371
**Program ID:** AIR 079 00010

**Permit Issued To:** CNH Industrial America LLC
**Name of Source in Application:** CNH Industrial America LLC

**Mailing Address:** PO Box 4902, Grand Island, Nebraska 68802
**Source Location:** 3445 W. Stolley Park Rd, Grand Island, Hall County, Nebraska

## DESCRIPTION OF THE SOURCE OR ACTIVITY:

This operating permit #OP13R1-006 approves the operation of a farm machinery and equipment manufacturing facility performing fabrication, assembly, and painting of metal parts. CNH Industrial America LLC (formerly CNH America LLC; hereafter CNH) operates under the standard industrial classification (SIC) code 3523 (manufacturing farm machinery and equipment). Further description of the source is detailed in the table below:

| Emission Point ID# | Control Equipment ID# and Description | Emission Unit Description | Relevant Standards |
|---|---|---|---|
| 7961 | - | Pretreatment System (9-Stage Washer), constructed in 2002. | NESHAP Subparts A and MMMM |
| 7962 | - | E-Coat System, constructed in 2002. | |
| 7962-T | - | E-Coat Feed Storage Tank, constructed in 2002. | |
| 7966 | - | Cooling Tunnel, constructed in 2002. | |
| 7969 | - | Inspection and Preparation Booth, constructed in 2002. | |
| 7970 | - | Paint Sludge Removal System, constructed in 2002. | |
| 7971 | - | Flash Off Tunnel constructed in 2002. | |
| 7975 | Dry fabric filters, with 98% control efficiency for particulate matter | Touch-up Booth #1, constructed in 1965. | |
| 7982 | Dry fabric filters, with 98% control efficiency for particulate matter | Touch-up Booth #2, constructed in 1965. | |
| 7986 | - | Paint Mixing Room for Topcoat Booths, constructed in 2002. | |
| 7988 | Downdraft water wash system (scrubber), with 99.5% control efficiency for particulate matter | Topcoat Booth No. 1, 50% transfer efficiency, constructed in 2002. | |
| 7989 | Downdraft water wash system (scrubber), with 99.5% control efficiency for particulate matter | Topcoat Booth No. 2, 50% transfer efficiency, constructed in 2002. | |
| 4814 | - | Paint Stripper Tank, constructed in 1965. | |

| Emission Point ID# | Control Equipment ID# and Description | Emission Unit Description | Relevant Standards |
|---|---|---|---|
| 8907 | Dry fabric filters, with 98% control efficiency for particulate matter | Index Paint System – Booth No. 1 (Primer), installed in 2007 | NESHAP Subparts A and MMMM |
| 8908 | Dry fabric filters, with 98% control efficiency for particulate matter | Index Paint System – Booth No. 2 (Topcoat), installed in 2007 | |
| 8919 | Dry fabric filters, with 98% control efficiency for particulate matter | Powder Coat Booth #1, with a reclamation system, with 90% reclamation efficiency, installed in 2008 | |
| 8920 | Dry fabric filters, with 98% control efficiency for particulate matter | Powder Coat Booth #2, with a reclamation system, with 90% reclamation efficiency, installed in 2008 | |
| 8921 | Dry fabric filters, with 98% control efficiency for particulate matter | Powder Coat Booth #3, with a reclamation system, with 90% reclamation efficiency, installed in 2008 | |
| 8922 | Dry fabric filters, with 98% control efficiency for particulate matter | Powder Coat Manual Booth, with a reclamation system, with 90% reclamation efficiency, installed in 2008 | |
| 2153 | - | Building 2 – Air Makeup Unit, 11.7 MMBtu/hr maximum capacity, natural gas fired, constructed in 1994. | None |
| 7956 | - | Index Line – Boiler, 5.5 MMBtu/hr maximum capacity, natural gas fired, installed in August 2012. | NESHAP Subparts A and DDDDD |
| 7960 | - | Pretreatment Boiler, 12.5 MMBtu/hr maximum capacity, natural gas fired, constructed in 2004. | NSPS Subparts A and Dc; NESHAP Subparts A and DDDDD |
| 7965 | - | E-Coat Oven, 10.5 MMBtu/hr maximum capacity, natural gas fired, constructed in 2004. | None |
| 7972 | - | Topcoat Oven, 12.0 MMBtu/hr maximum capacity, natural gas fired, constructed in 2002. | None |
| 7988 | - | Topcoat Booth No. 1's Air Makeup Unit, 10.85 MMBtu/hr maximum capacity, natural gas fired, installed in 2004. | None |
| 7989 | - | Topcoat Booth No. 2's Air Makeup Unit, 10.85 MMBtu/hr maximum capacity, natural gas fired, installed in 2004. | None |
| 8909 | | Index Paint System – Dryoff Oven, 8.0 MMBtu/hr maximum capacity, natural gas fired, constructed in 2007. | None |
| 8910 | - | Index Paint System – Cure Oven, 14.0 MMBtu/hr maximum capacity, natural gas fired, constructed in 2007. | None |
| 8915 | - | Powder Coat Hot Water Boiler #1 (used unit), 8.4 MMBtu/hr maximum capacity, natural gas fired, installed in August 2008. | NESHAP Subparts A and DDDDD |

| Emission Point ID# | Control Equipment ID# and Description | Emission Unit Description | Relevant Standards |
|---|---|---|---|
| 8916 | - | Powder Coat Hot Water Boiler #2, 5.0 MMBtu/hr maximum capacity, natural gas fired, installed in August 2009. | NESHAP Subparts A and DDDDD |
| 8912 | Integrated Afterburner | Burn-Off Oven, modular starved air, 20 lb/hr maximum design burn capacity, 0.8 MMBtu/hr maximum capacity of fuel use, natural gas fired, installed March 2009. | None |
| 8914 | Afterburner | Burn-Off oven – Steelman Industries, pyrolysis incinerator, 300 lbs maximum capacity, 75 lbs/hr maximum design burn rate, 2.05 MMBtu/hr maximum capacity of fuel use, natural gas fired, installed January 30, 2012. | None |
| 8933 | Afterburner | Burn-Off Oven, 75 lb/hr maximum design burn capacity, 2.05 MMBtu/hr maximum capacity of fuel use, natural gas fired, installed June 17, 2013. | None |
| 2081 | None | Emergency generator:<br>Generator: Onan 30 KW, 37.5 kVa, Model 1562D, S/N 0372432647;<br>Engine: Ford Motor, 6 cylinder Inline 05123 B-22-HB, Engine displacement of 240, 0.36 MMBtu/hr maximum capacity, maximum displacement of 0.7 Liters/cylinder, propane fired, spark ignition reciprocating internal combustion engine ( SI RICE), installed in 1997, located in Shipping Building | NESHAP Subparts A and ZZZZ |
| 2082 | None | Emergency generator: Milbank, Model: MG3520831WIN, 64 hp, maximum displacement of 1.85 liters/cylinder, 6 cylinders, natural gas fired, , 35 kW, 120/208, SI RICE, 4-stroke rich burn, manufactured in 2014, installed in 2014, located in Front Office. | NSPS Subparts A and JJJJ; and NESHAP Subparts A and ZZZZ |
| 2111 | None | Emergency generator: Milbank, Model: MG120480310S, 190 hp, 1.26 MMBtu/hr maximum capacity, natural gas fired, SI RICE, 4-stroke rich burn, manufactured 2015, installed July 2015, located above paint office. | NSPS Subparts A and JJJJ; and NESHAP Subparts A and ZZZZ |

| Emission Point ID# | Control Equipment ID# and Description | Emission Unit Description | Relevant Standards |
|---|---|---|---|
| 2328 | None | Emergency generator:<br>Generator: Cummins Power Generation, Model: 35GGFD-5813223, S/N C07003739;<br>Engine: Ford Motor, 6 cyl. 5C 722 AB 4.2L Windsor Canada 2007 Model ESG642, S/N 07XK64378, 0.09 MMBtu/hr maximum capacity, natural gas fired, SI RICE, 4-stroke rich burn; manufactured March 28, 2007, installed December 2007; located in the Hay Tools Addition. | NESHAP Subparts A and ZZZZ |

General manufacturing processes employed include fabrication, assembly, and painting of metal parts. Specific fabrication processes employed during manufacture include sheering, punching, cutting, welding, and bending of sheet metal and plate steel. Machining operations are also performed on steel bar stock, castings, plate steel, and subassemblies. Welding of components is performed during fabrication and assembly operations. Paint coating operations, which normally occur after the fabrication and assembly operations, account for the majority of the air contaminant emissions at this source, which consist of both volatile organic compounds (VOC) and regulated hazardous air pollutants (HAP). Powder coating is also being utilized and does not exhibit nearly as many air emissions.

| Emission Units Removed | | |
|---|---|---|
| **Emission Point #** | **Emission Unit Description** | **Date Removed** |
| | 1800 gal/month Index System Recovery Unit | 2014 (replaced by 2 solvent recovery units) – Confirmed in CNH letter submitted April 3, 2015. The replacement did not require a construction permit. |
| 7996 | Burn off oven | 2012 (replaced by burn off oven #8933) |
| 8903 | Index System – Washwater Heater, 5.5 MMBtu/hr maximum capacity (note: permitted at 8.0 MMBtu/hr), natural gas fired. | Removed in August 1, 2012 (replaced by EU 7956) |
| 8907 | Index Paint System – Primer Booth's Air Makeup Unit, 7.0 MMBtu/hr maximum capacity, natural gas fired. | Removed prior to May 2015 |
| 8908 | Index Paint System – Topcoat Booth's Air Makeup Unit, 7.0 MMBtu/hr maximum capacity, natural gas fired. | Removed prior to May 2015 |
| 7969 | Inspection and Preparation Booth's Air Makeup Unit, 5.0 MMBtu/hr maximum capacity, natural gas fired, constructed in 2002. | Removed prior to May 2015 |
| 7975 | Touch-up Booth's Air Makeup Unit, 6.6 MMBtu/hr maximum capacity, natural gas fired. | Removed prior to May 2015 |

| Emission Units Removed | | |
|---|---|---|
| **Emission Point #** | **Emission Unit Description** | **Date Removed** |
| 7982 | Touch-up Booth's Air Makeup Unit, 6.6 MMBtu/hr maximum capacity, natural gas fired. | Removed prior to May 2015 |
| 2111 | Marathon Electric Magna One Synchronous AC emergency generator: Detroit Diesel 4 cyl, Model: 10437005 – Unit 4A0249217, 0.36 MMBtu/hr maximum capacity, diesel fired, compression ignition reciprocating internal combustion engine (CI RICE), Generator Model 360FDR801266-E193W; S/N LD-94092 Type FDR; 100 kW, 125 kVA, installed in 1980, located above paint office. | July 2015 (replaced by 190 hp natural gas engine. CNH is keeping the same emission point number for the new engine, as was the old emission point number.) CNH notified NDEQ of the replacement in the April 2, 2015 letter, with more detailed submitted in May 19, 2015. The replacement did not require a construction permit. NDEQ's September 2015 inspection confirmed diesel engine has been removed from site. |
| 2000 | Office – 1.66 MMBtu/hr heater, natural gas fired, used for comfort heat | Removed November 2015. Replaced by Emission Point 2141 boiler. |
| For equipment removed from 2002 to 2007, see the Fact Sheet Attachment Page 23 of Operating Permit OPSPR1-0056 issued August 7, 2008. | | |

## PERMIT HISTORY

| Type of Construction Permit or Application | Issue Date | Permit Status |
|---|---|---|
| Construction Permit | No Permit Required, May 12, 1986 | Superseded by CP Issued September 24, 2002 |
| Construction Permit | No Permit Required, September 16, 1994 | Active |
| Construction Permit application #CP94-0080 | No Permit Required, November 16, 1994 | Active |
| Construction Permit #CP02-003 | Issued September 24, 2002 | Superseded by CP Issued September 7, 2007 |
| Construction Permit (Minor Modification) #CP02-0059 | Issued March 31, 2003 | Superseded by CP Issued September 7, 2007 |
| Construction Permit (Minor Modification) #CP03-0076 | Issued February 26, 2004 | Superseded by CP Issued September 7, 2007 |
| Construction Permit #CP04-0056 | Issued March 15, 2005 | Inactive; Emission Unit removed in 2012 |
| Construction Permit #CP07-0035 | Issued September 7, 2007 | Active |
| Construction Permit #CP11-032 | Issued December 20, 2011 | Active |

May 12, 1986: A No Permit Required (NPR) letter was issued for a replacement paint system. The NPR stated that no permit was required due to the low anticipated increase in emissions of VOCs.

September 16, 1994: A construction permit determination request was submitted, along with pertinent information, concerning plans for a new furnace. The follow-up letter by the NDEQ indicated that no construction permit was required for the proposed furnace because the potential emissions were below the required construction permit thresholds.

November 15, 1994: A construction permit determination request was submitted concerning a natural gas fired make-up air system furnace. This furnace was determined to be too small to require a construction permit and a confirmation letter was sent by the NDEQ November 16, 1994.

March 5, 1996: A letter was sent by the NDEQ to CNH America, operating under a previous name, regarding a meeting that took place on February 29, 1996. The letter stated operations preceded the Prevention of Significant Deterioration (PSD) regulations and that, although the source would qualify as PSD major, because the potential emissions are over 250 tons per year, no construction permits or Best Available Control Technology (BACT) analysis is required until Title 129, Chapter 17 construction permit thresholds or the PSD significance levels are exceeded.

September 24, 2002: A Construction Permit Modification was issued to New Holland North America, Inc. Following a merger with Case, New Holland transferred hay equipment manufacturing to another plant and expanded combine manufacturing capacity. This production shift included a change in the painting system. A switch occurred from a spray primer and enamel topcoat system to an e-coat primer and urethane topcoat spray system, both of which are associated with lower VOC and HAP emissions than previously used materials and processes. The e-coat primer system utilizes emersion tanks that electrically bond the primer to the metal parts, thereby increasing the transfer efficiency over the spray primer system that it replaced. Although production and related painting volume may increase depending upon production demand, facility-wide emissions were shown to decrease as a result of the modification as documented in the fact sheet and associated construction permit issued to New Holland on September 24, 2002. All VOC and HAP emissions estimates are based upon a mass balance assumption that 100 percent of these paint coating material components are emitted to the atmosphere during painting operations. Therefore, coating product throughput records demonstrate VOC and HAP air emissions directly because the mass fraction of HAP and/or VOC is accounted for in the product formulation records.

The construction permit also included approval of new paint lines as well as requirements for the removal of old paint lines.

Planned new construction consisted of an addition to an existing building which houses the e-coat painting system and collectively includes surface preparation, painting (both primer and topcoat), and drying. Parts of the existing painting system were removed. The equipment removed was important to the construction permit process because New Holland was applying, in part, on the associated emission reductions to consideration under the PSD program. This is discussed in more detail in the following Applicable Requirements section as well as the construction permit and fact sheet dated September 24, 2002.

March 25, 2003: The NDEQ issued an administrative amendment to the September 24, 2002 construction permit that documented the addition of a touch-up paint spray booth (Unit # 7982). The NDEQ concluded that no net increase in emissions would occur from painting operations not affecting production capacity, however, a small increase in emissions resulted from fuel combustion by the touch-up paint booth natural gas fired air make-up unit (heat input capacity of 6.6 MMBtu/hr). The new touch-up booth operations are being moved from other painting operations at the facility. The new booth is to streamline the flow of production.

February 26, 2004: a construction permit amendment was issued which modified the September 2002 construction permit and its 2003 amendment. The following modifications were made:

- Effective January 1, 2004, NHNA merged with an affiliated company under common ownership and changed the name to CNH America LLC.
- Construction of a building East of the 2002 building addition to accommodate larger painting booths;
- Converted an existing topcoat paint booth into an inspection and preparation booth (Unit # 7969) {no longer used solvents or paints in booth};
- Replaced the remaining permitted topcoat paint booths (Units #7967 and 7968) with two larger topcoat paint booths (Units #7988 and 7989). Unit 7968 was never installed, but it had been permitted in 2002;
- Increased the size of the air make-up unit in each larger topcoat paint booth to 10.85 MMBtu/hr;
- Added dedicated paint guns for each color;
- Installed a new topcoat paint material supply and circulation system using thermoset acrylic paint instead of urethane paints, including an additional Paint Mixing Room (Unit #7986) dedicated to the thermoset acrylic paint;
- In-kind replacement of the flash tunnel near the existing topcoat oven;
- Reconfiguration of the existing conveyer system that would increase efficiency in moving parts through the topcoat booths.

March 12, 2005: A construction permit was issued for a burn-off oven (Unit # 7996). The burn-off oven removes dried paint from metal parts that will be repainted, as well as racks and hooks used to move and hold metal parts during the painting process. This permit did not modify the 2002 construction permit.

September 7, 2007: A construction permit (CP07-0035) was issued which modified the source to include a new hay equipment manufacturing line. The permit modifications include new burn-off oven (ID #8912); new index paint system (ID #s 8903, 8907, 8908, and 8909) to replace an existing paint system (ID #s 7912, 7916, 7917, and 7918); addition of VOC additives in an existing paint stripping system (ID#4814); and addition of VOC solvent cleaner to existing Inspection and Preparation Booth (ID# 7969). This permit supersedes Construction Permits CP02-0003 (Issued September 24, 2002), CP02-0059 (Issued March 31, 2003), and CP03-0076 (Issued February 26, 2004).

August 7, 2008: Operating Permit #OPSPR1-0056 (renewal) was issued.

December 20, 2011: Construction Permit #CP11-032 was issued for the installation of two burn-off ovens (Emission Units 8914 and 8933). These burn-off ovens replace burn-off oven #7996 (CP04-0056).

Early 2014: CNH America LLC changed its name to CNH Industrial America LLC.

## COMPLIANCE HISTORY

March 23, 2011: NDEQ inspection – no violations of Operating Permit #OPSPR1-0056 issued on August 7, 2008 have been identified.

June 25, 2013: NDEQ inspection – no violations of Operating Permit #OPSPR1-0056 issued on August 7, 2008 and Construction Permit CP11-032 issued on December 20, 2011 have been identified.

September 9, 2015: NDEQ inspection – no violations of Operating Permit #OPSPR1-0056 issued on August 7, 2008 and Construction Permit CP11-032 issued on December 20, 2011 have been identified.

## TYPE AND QUANTITY OF AIR CONTAMINANT EMISSIONS ANTICIPATED:

The source emits particulate matter (PM), particulate matter less than or equal to 10 microns ($PM_{10}$), particulate matter less than or equal to 2.5 microns ($PM_{2.5}$), sulfur dioxide ($SO_2$), nitrogen oxides ($NO_x$), carbon monoxide (CO), volatile organic compounds (VOC), and hazardous air pollutants (HAPs). The majority of the emissions are VOC and HAPs from the painting (primer/topcoat), paint stripping, and other associated chemical usage. Other pollutant emissions are from fuel combustion in the heaters, air make-up units, ovens, emergency RICE, boilers, and the incineration of cured paint in the burn-off oven.

The surface coating and associated operations' VOC emission limit in this operating permit is from the September 7, 2007 construction permit, and the HAP emission limits are from NESHAP Subpart MMMM. A HAP calculation method is included in this operating permit to allow CNH to deduct materials with HAP contents that are shipped off site for disposal or to be recycled because those HAPs will not be emitted by CNH.

VOC, HAP, PM, $PM_{10}$, and $PM_{2.5}$ emissions from the surface coating processes were calculated by CNH using information contained in Material Safety Data Sheets (MSDSs). The amount of HAP and/or VOC in pounds per gallon is multiplied by the total amount of material used to give the resulting emissions estimate. All (100%) of the HAP and VOC contained in the materials used at the source are assumed to be emitted to the atmosphere. No emission control devices for HAPs or VOCs are currently used or have been proposed by CNH. The PM, $PM_{10}$, and $PM_{2.5}$ emissions from the Topcoat Booths (Units 7988 and 7989) are controlled by downdraft water wash system (scrubber). The PM, $PM_{10}$, and $PM_{2.5}$ emissions from the Index Paint System's Booths #1 and #2 are controlled by dry fabric filters. The Powder Coat Booths (Units 8919, 8920, 8921, and 8922) each have a reclamation system that recycles 90% of the powder coat paint to be reused in the booth, and each have final dry filters that are used to filter the air to keep the powder coat painting room clean (also controls particulate matter emissions). All of the operations within each powder coat booth work interdependently (i.e. all must function for the entire system to operate).

The E-Coat systems (Units 7962 and 7962-T) involve parts being dipped into a paint bath. The bath is filled with paint particles, water, and other components. Direct current is applied between the parts in the bath and a "counter" electrode. This causes the resin in the paint to become ionic. Paint is then attracted to, and deposited on, the part. As more and more particles collect, water is squeezed out and cross linking of the resin particles occurs. The parts are then removed from the bath, rinsed to remove paint solids that were not deposited, and baked to cure the paint. With this process, particulate matter does not become airborne. In addition, this is a wet process where the residual solids either remain in the bath or are rinsed off after coating.

Combustion emissions from boilers, cure ovens, dry-off oven, burn-off ovens, heaters, air make-up units, and emergency generator RICE, were calculated using the Compilation of Air Pollutant Emission Factors, 5th Edition, Volume 1 (AP-42), Chapters 1.4, 3.2 and 3.3. The criteria pollutants for the burn-off oven are from the manufacturer's documentation submitted with the applications for Construction Permits CP07-0035 and CP11-032, and the HAP emissions from fuel combustion were calculated using AP-42 emission factors. The Fact Sheet Attachment contains all pertinent emission calculations.

The following table summarizes the potential and actual emissions:

| Regulated Pollutant | Potential Emissions as limited by permit (tons/year)[3] | Actual Emissions[4] (tons/year) |
|---|---|---|
| Particulate Matter (PM) | 12.98 | -- |

| Regulated Pollutant | Potential Emissions as limited by permit (tons/year)[3] | Actual Emissions[4] (tons/year) |
|---|---|---|
| Particulate Matter less than or equal to 10 microns ($PM_{10}$) | 10.48 | 0.28 |
| Particulate Matter less than or equal to 2.5 microns ($PM_{2.5}$) | 10.32 | 0.21 |
| Sulfur Dioxide ($SO_2$) | 0.84 | 0.02 |
| Oxides of Nitrogen ($NO_x$) | 126.95 | 2.73 |
| Carbon Monoxide (CO) | 83.58 | 2.30 |
| Volatile Organic Compounds (VOCs) | 397.31 | 55.66 |
| Greenhouse Gases (GHGs)[1] | | |
| Mass Basis[1] | 125,630.35 | 0.54 |
| Carbon Dioxide Equivalents ($CO_2e$)[1] | 125,635.37 | 0.54 |
| Hazardous Air Pollutants (HAPs) [2] | | |
| Ethyl Benzene | 0.74 | 0.07 |
| Hexane | 1.90 | -- |
| Phenol | 0.41 | -- |
| Toluene | 0.73 | 0.06 |
| Xylenes | 3.73 | 0.47 |
| All Other HAPs | 0.27 | 0.41 |
| Total HAPs | 8.75 | 1.01 |

[1] Note that GHGs and $CO_2e$ are included in this table although GHGs is not a regulated air pollutant at this facility. See the Chapter 5 discussion below for more detail.

[2] The Individual HAPs that are listed are those HAPs whose PTE exceeded the reporting levels specified in Title 129 Appendixes II and III.

[3] The Potential Emissions include the emissions from insignificant activities.

[4] Actual Emissions are from 2015 air emissions inventory.

## APPLICABLE REQUIREMENTS AND VARIANCES OR ALTERNATIVES TO REQUIRED STANDARDS:

### Title 129, Chapter 5 – Operating Permit Program

This facility qualifies as a major Class I source in accordance with definitions in Title 129, Chapter 2, because the source has the potential to emit 100 tpy or more of VOC emissions, and the source has not elected to accept limits below this amount to qualify as a synthetic minor Class II source.

The U.S. Supreme Court issued a decision on June 23, 2014, that greenhouse gases (GHGs) may not be used to determine whether or not a source is a Class I (major) source. Therefore, potential emissions of GHGs will not be used to determine a source's operating permit classification at this time. However, GHGs are still regulated air pollutants and GHGs and $CO_2e$ will continue to be calculated and reported in this fact sheet.

**Title 129, Chapter 12 – Operating Permit Renewal and Expiration**

The NDEQ received a renewal Class I Operating Permit application for the August 7, 2008 operating permit on February 16, 2013. This application was timely and deemed complete; therefore, the source met the requirements of Title 129, Chapter 12.

**Title 129, Chapter 18 - New Source Performance Standards (NSPS)**

Subpart A – General Provision:

This subpart, adopted by reference in Title 129, Chapter 18, Section 001.01, applies to the owner or operator of any stationary source that is subject to any standard, limitation, prohibition, or federally enforceable requirement established pursuant to Part 60.

Subpart Dc – Small Industrial-Commercial-Institutional Steam Generating Units:

This subpart, adopted by reference in Title 129, Chapter 18, Section 001.52, applies to the owner and operator of small industrial, commercial, institutional steam generating units. The Pretreatment Boiler (Emission Unit # 7960) is subject to NSPS Subpart Dc. This NSPS subpart covers units constructed after June 9, 1989 that have a heat input rating between 10 million Btu/hr and 100 million Btu/hr. Emission Unit #7960 is rated at 12.5 million Btu/hr. The boiler will be fired exclusively on natural gas, therefore, the source is required only to measure and record fuel use and comply with certain reporting requirements {40 CFR 60.48c(g), (h), and (i)}.

NSPS Subpart JJJJ- Stationary Spark Ignition Internal Combustion Engine (SI ICE):

This subpart, adopted by reference in Title 129, Chapter 18, Section 001.82, and applies to stationary spark ignition internal combustion engines that commence construction after June 12, 2006, where the engines are manufactured:

- On or after July 1, 2007, for engines with a maximum engine power greater than or equal to 500 hp ;
- On or after January 1, 2008, for lean burn engines with a maximum engine power greater than or equal to 500 hp and less than 1,350 hp.
- On or after July 1, 2008, for engines with a maximum engine power less than 500 hp or
- On or after January 1, 2009, for emergency engines with a maximum engine power greater than 19 kW (25 hp).

For the purposes of this subpart, the date that construction commences is the date the engine is ordered by the owner or operator. Emission Units #2081 and 2328 are not subject to NSPS Subpart JJJJ, because the engines were manufactured and installed prior to 2008, and haven't been modified or reconstructed. Emission Unit #2082 is subject to NSPS Subpart JJJJ since it was constructed after January 1, 2009. In July 2015, Emission Unit #2111 changed from a 51.43 hp diesel engine (CI ICE) to a 190 hp natural gas engine (SI ICE) due to an engine replacement. Since the new 190 hp engine was constructed after January 1, 2009, it is subject to NSPS Subpart JJJJ. This subpart includes limitations on $NO_x$, CO, and VOC. Demonstration of compliance of these emission limits is based on the manufacturer's certification, and proper maintenance and operation of the RICE in accordance to the manufacturer's written instructions. If CNH doesn't comply with the manufacturer's instruction for proper maintenance and operations, then the engine(s) is subject to requirements for non-certified engines in this subpart, including testing of the engine(s).

On May 4, 2016, the U.S. Court of Appeals for District of Columbia Circuit issued a decision in the case of *Delaware v. EPA* [785 F 0.3d 1] which affected NSPS Subparts IIII and JJJJ, and NESHAP Subpart ZZZZ. In the court decision, paragraphs §60.4243(d)(2)(ii)-(iii) of NSPS Subpart JJJJ were vacated.

The following NSPS appear to apply to the source but do not:

Subpart CCCC/DDDD - Commercial and Industrial Solid Waste Incineration Units:

This subpart, adopted by reference in Title 129, Chapter 18, Section 001.85 and 001.86, applies to the owner and operator of commercial and industrial solid waste incineration (CISWI) units. Subpart CCCC applies to units that commence construction after June 4, 2010 or commenced reconstruction or modification after August 7, 2013. Subpart DDDD applies to units that commence before or on the applicability dates of the Subpart CCCC. Subpart DDDD is a set of guidelines to states for developing state plans to regulate existing CISWI units including model rules. NDEQ has adopted the model rules specified in Subpart DDDD as its state plan. The Burn-Off Ovens (Emission Units #8912, 8914, and 8933) are not subject to NSPS, Subpart CCCC or DDDD. This NSPS has a specific exemption for burn-off ovens for rack, part and drum reclamation units (burn-off oven definition in 40 CFR 60.2265 and 60.2875). A rack reclamation unit is a unit that burns coatings racks used to hold small items for application of a coating. A rack reclamation unit burns the coating overspray off the rack so that the rack can be reused. A part reclamation unit is a unit that burns coatings off parts (e.g., tools, equipment) so that the parts can be reconditioned and reused. A drum reclamation unit means a unit that burns residues out of drums (e.g., 55 gallon drums) so that the drums can be reused. Burn-Off Ovens (Emission Units #8912, 8914, and 8933) will be operated as both a rack and part reclamation unit and is therefore exempt from this subpart.

Subpart IIII – Stationary Compression Ignition Internal Combustion Engine (CI ICE):

This subpart, adopted by reference in Title 129, Chapter 18, Section 001.76, applies to owners and operators of stationary compression ignition (CI) internal combustion engines (ICE) with displacement of less than 30 liters per cylinder that commenced construction, modification or reconstruction after July 11, 2005. The diesel CI RICE was replaced in 2015 with a natural gas SI RICE. Therefore, no engines are subject to NSPS Subpart IIII, at the time of issuance of this permit.

On May 4, 2016, the U.S. Court of Appeals for District of Columbia Circuit issued a decision in the case of *Delaware v. EPA* [785 F 0.3d 1] which affected NSPS Subparts IIII and JJJJ, and NESHAP Subpart ZZZZ. In the court decision, paragraphs §60.4211(f)(2)(ii)-(iii) of NSPS Subpart IIII were vacated.

Note that NSPS rules are subject to change. Detailed information related to NSPS subparts can be found on the NDEQ NSPS Notebook located on the NDEQ website (www.deq.ne.gov). It is the source's obligation to comply with applicable NSPS subparts and requirements whether or not they are identified in this permitting action or Title 129.

**Title 129, Chapter 19 - Prevention of Significant Deterioration (PSD)**

This source is an existing major source with respect to PSD, with potential controlled emissions of 390.8 tons per year VOC from the surface coating operations. Previous construction permits issued to the facility were for minor modifications of an existing major PSD facility. A surface coating facility is major for PSD when the potential controlled emissions are greater than 250 tons/yr of VOC.

**Title 129, Chapter 20 - Particulate Limitations**

*Title 129, Chapter 20, Section 001 -Process Weight Rate Limit*

Title 129, Chapter 20, Section 001, says that PM (filterable) emissions cannot be "in excess of the amounts in Table 20-2 during **any** one hour" (emphasis added). This means that the process weight rate limits, which are based on throughput of the emission units, varies as throughputs vary. Each limit given in the permit is based on the maximum design throughput of the associated emission units. When the emission units operate at less than maximum design throughputs, the process weight rate limits are different because the limits are based on actual throughputs.

Total Hourly Process Weight : $E = 4.10\ p^{0.67}$ = lbs/hr PM allowable rate

Where p = tons/hr of process weight rate

| Emission Units | Process Weight Rate | | | Allowable Emission Rate (lb/hr) | Potential Emission Rate (lb/hr) |
|---|---|---|---|---|---|
| | (lb/yr) | (lb/hr)[1] | (tons/hr) | | |
| 7962 | 145,185 | 16.57 | 0.008 | 0.165 | 0.00 |
| 7962-T | 145,185 | 16.57 | 0.008 | 0.165 | 0.00 |
| 7988 | 266,445 | 30.42 | 0.015 | 0.248 | 0.064 |
| 7989 | 266,445 | 30.42 | 0.015 | 0.248 | 0.06 |
| 7975 | 19,181 | 2.19 | 0.001 | 0.043 | 0.015 |
| 7982 | 19,181 | 2.19 | 0.001 | 0.043 | 0.015 |
| 8907 | 466,102 | 53.21 | 0.027 | 0.361 | 0.23 |
| 8909 | 466,102 | 53.21 | 0.027 | 0.361 | 0.23 |
| 8919 | | 27.43 | 0.014 | 0.232 | 0.11 |
| 8920 | | 27.43 | 0.014 | 0.232 | 0.11 |
| 8921 | | 27.43 | 0.014 | 0.232 | 0.11 |
| 8922 | 180,193.2 | 20.57 | 0.010 | 0.19 | 0.08 |
| Welding | 1,472,380.80 | 168.08 | 0.084 | 0.78 | 0.000874 |

[1] Process Weight Rate (lbs/hr) is based on 8,760 hrs/yr of operation.

*Title 129, Chapter 20, Section 002 -Particulate Emissions from Combustion Sources*

This regulation limits the allowable maximum PM caused by the combustion of fuel to be emitted from any stack into the atmosphere in excess of the hourly rate set forth in Chapter 20, Table 20-1. Units with a total heat input equal to or less than 10 MMBtu/hr have a maximum allowable emission rate of 0.6 lb/MMBtu. Units with a total heat input greater than 10 MMBtu/hr and less than 100 MMBtu/hr have a maximum allowable emission rated calculated as follows:

$$A = \frac{1.026}{\left(I^{0.233}\right)}$$

Where,

A = maximum allowable PM emission rate in lb/MMBtu
I = total heat input in MMBtu/hr

| Emission Unit | Maximum Capacity (MMBtu/hr) | Allowable Emission Rate | | Potential Emission Rate[1] (lb/hr) |
|---|---|---|---|---|
| | | (lb/MMBtu) | (lb/hr) | |
| 2153 | 11.7 | 0.58 | 6.77 | 0.09 |
| 7956 | 5.5 | 0.6 | 3.30 | 0.04 |
| 7960 | 12.5 | 0.57 | 7.12 | 0.09 |
| 7965 | 10.5 | 0.59 | 6.23 | 0.08 |
| 7972 | 12.0 | 0.58 | 6.90 | 0.09 |
| 7988 | 10.85 | 0.59 | 6.39 | 0.08 |
| 7989 | 10.85 | 0.59 | 6.39 | 0.08 |
| 8909 | 8.0 | 0.6 | 4.80 | 0.06 |
| 8910 | 14.0 | 0.55 | 7.77 | 0.10 |
| 8915 | 8.4 | 0.6 | 5.04 | 0.06 |
| 8916 | 5.0 | 0.6 | 3.00 | 0.04 |
| 2081 | 0.36 | 0.6 | 0.22 | 0.01 |
| 2082 | 0.45 | 0.6 | 0.27 | 0.01 |
| 2111 | 1.26 | 0.6 | 0.76 | 0.01 |
| 2328 | 0.09 | 0.6 | 0.05 | 0.004 |

[1] Potential Emission Rate (lb/hr) are from the emission calculations for each emission unit in the Fact Sheet Attachment.

Title 129, Chapter 20, Section 008 states the PM (filterable) limit in Chapter 20, Sections 001 and 002 applies, unless a more stringent PM limit is specified elsewhere in Title 129. Emission Units 8912, 8914, and 8933 (burn-off ovens) do not have to comply with the PM limit in Chapter 20, Sections 001 and 002, because they are subject to the PM limit in Chapter 22.

*Title 129, Chapter 20, Section 004 - Opacity*

In accordance with Chapter 20, Section 004, no person shall cause or allow emissions, from any source, which are of an opacity equal to or greater than 20%. It is anticipated that the opacity limit will not be exceed as a result of burning natural gas in the combustion units and the required control equipment on the coating spray booths.

**Title 129, Chapter 22 – Incinerator Requirements**

In accordance with Section 002, particulate matter emissions from each of the burn-off oven (incinerator) are limited to 0.10 grains per dry standard cubic feet of exhaust flow. It is not expected the source will violate this requirement based on performance test data of similar commercially designed units with afterburner controls. Operational, monitoring, and recordkeeping requirements from Title 129, Chapter 22 have been included in Condition III.(C) of the operating permit.

**Title 129, Chapter 24 - Sulfur Compound Emissions**

Title 129, Chapter 24, Section 001 applies to combustion emission units that existed prior to February 26, 1974. All combustion units at CNH Industrial America were constructed after that date, so Title 129, Chapter 24 is not an applicable requirement of any of the combustion units.

**Title 129, Chapter 28 - National Emission Standards for Hazardous Air Pollutants (NESHAP)**

Since the facility previously exceeded 10 tons/yr of individual HAP and 25 tons/yr of total HAP at the time of implementation of NESHAP Subparts MMMM, ZZZZ, and DDDDD, CNH is considered a major source for HAPs as part of the once in, always in policy from EPA concerning major sources subject to NESHAP requirements (i.e. the NESHAP requirement for control can reduce emissions below major source threshold, but the emission unit is still subject to the NESHAP). In this operating permit, CNH requested throughput limitations to avoid CAM requirements for PM from several paint booths, which also incidentally reduced the amount of xylene (highest individual HAP) and total HAP.

Subpart A – General Provision:

This subpart, adopted by reference in Title 129, Chapter 28, Section 001.01, applies to the owner or operator of any stationary source that emits or has the potential to emit any hazardous air pollutant listed in or pursuant to section 112(b) of the Act; and is subject to any standard, limitation, prohibition, or federally enforceable requirement established pursuant to Part 63. This source is subject to this subpart because it is subject to one or more subparts contained in Part 63 and emits hazardous air pollutants listed in section 112(b) of the Act.

Subpart MMMM – Miscellaneous Metal Parts and Products:

This subpart, adopted by reference in Title 129, Chapter 28, Section 001.81, applies to surface coating of miscellaneous metal parts and products located at a major HAP source, which uses 250 gallons/yr or more of coatings that contain organic HAP. Surface coating includes surface preparation, cleaning, coating mixing, and storage. CNH's surface coating operations are subject to this subpart, because CNH is a major source of HAP and uses greater than 250 gallons per year of coatings that contain organic HAP. The subpart (§63.3890(a)(1)) established a limit for new general use coating affected sources of 1.9 lb organic HAP/gallon solids (combined), which applies to all of the coating activities at CNH which commenced construction after August 13, 2002. Emission Units 7975, 7982, and 4814 (commenced construction prior to August 13, 2002) are subject to existing general use affected sources limit of 2.6 lb organic HAP/gallon solids per §63.3890(b)(1).

The source uses solvents and paint stripping additives that contain no HAPs. The source also uses small quantities of solvents that contain HAPs in the Touchup Booths. The E-coat system doesn't use coatings containing HAPs.

To comply with this subpart, the source has three compliance options: (1) Compliant material option; (2) Emission rate without add-on controls option; or (3) Emission rate with add-on controls options. CNH has chosen the emission rate without add-on controls option, but the OP allows CNH to change the option during the operating permit term. With the emission rate option, CNH will calculate the emissions from the chemicals (coatings, thinners, other additives, cleaning materials) used in the surface coating operations on a rolling 12-month calendar year basis. Additionally, with the emission rate option, CNH must develop and implement a work practice plan to minimize organic HAP emissions as specified in §63.3893(b). The subpart requires notification requirements per §63.3910, reporting requirements per §63.3920, and recordkeeping requirements per §63.3930.

Subpart ZZZZ – Stationary Reciprocating Internal Combustion Engines:

This subpart, adopted by reference in Title 129, Chapter 28, Section 001.88, applies to new and existing stationary reciprocating internal combustion engines (RICE) located at a major and area sources of HAPs excluding stationary RICE being tested at a stationary RICE test cell/stand. Engines 2081, 232, 2082, and 2111 are subject to this subpart (§63.6590).

| Emission Unit | Subpart ZZZZ category | Citations | Requirements |
|---|---|---|---|
| 2081 | Existing SI ICE, <500 hp, emergency, at a major HAP source | §63.6602, Table 2c Item 6; §63.6625(j) | Change oil and filter every 500 hours of operation or annually, whichever comes first;<br><br>Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first, and replace as necessary; and<br><br>Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary. |
| 2328 | Existing SI ICE, <500 hp, emergency, 2-stroke lean burn, at a major HAP source | | |
| 2082 and 2111 | New emergency RICE <500 hp, at a major HAP source | §63.6590(c)(6) | Comply with NSPS Subpart JJJJ requirements. |

On May 4, 2016, the U.S. Court of Appeals for District of Columbia Circuit issued a decision in the case of *Delaware v. EPA* [785 F 0.3d 1] which affected NSPS Subparts IIII and JJJJ, and NESHAP Subpart ZZZZ. In the court decision, paragraphs §63.6640(f)(2)(ii)-(iii) of NESHAP Subpart ZZZZ were vacated.

Subpart DDDDD – Industrial, Commercial and Institutional Boilers and Process Heaters at Major Sources of HAP:

This subpart, adopted by reference in Title 129, Chapter 28, Section 001.90, applies to boilers and process heaters that are located at major HAP sources. Emission Units 7956, 7960, 8915 and 8916 are subject to this subpart, because they are considered existing units designed to burn gas 1 category fuels (i.e. natural gas only). The other combustion units do not meet the definition of boiler or process heater in NESHAP Subpart DDDDD. Boiler 2141 is classified as a hot water heater, and therefore not subject to NESHAP Subpart DDDDD.

The units designed to burn gas 1 fuels subcategory are required to conduct periodic tune-ups of each unit. Since Emission Unit 7960 is greater than 10 MMBtu/hr, then the tune-ups must be conducted at least once per every year [§63.7500(a)(1) and NESHAP Subpart DDDDD Table 3

Item 3]. Emission Unit 8915 is greater than 5 MMBtu/hr and equal to or less than 10 MMBtu/hr, therefore the tune-ups must be conducted at least once per every 2 years [§63.7500(e)]. Emission Unit 8916 is equal to or less than 5 MMBtu/hr, therefore the tune-ups must be conducted at least once per every 5 years [§63.7500(e)].

Note that NESHAP rules are subject to change. Detailed information related to NESHAP subparts can be found on the NDEQ Air Toxics Notebook located on the NDEQ website (www.deq.ne.gov). It is the source's obligation to comply with applicable NESHAP subparts and requirements whether or not they are identified in this permitting action or Title 129.

**Title 129, Chapter 31 – Compliance Assurance Monitoring**

Compliance Assurance Monitoring (40 CFR 64) was adopted in its entirety in Title 129, Chapter 31. Compliance Assurance Monitoring (CAM) applies to a pollutant-specific emission unit at a major source that is required to obtain a Title V permit, and satisfies all of the following criteria:

1) The unit is subject to an emission limitation or standards for the applicable regulated air pollutant;
2) The unit uses a control device to achieve compliance with the emission limitation or standard; and
3) The unit has potential pre-control device emissions of the regulated air pollutant are equal to or greater than 100 percent of the amount, in tons per year, required for a source to be classified as a major source.

CAM does not apply to pollutant-specific emission unit that has:

1) the emission limitation or standard is subject to a NSPS or NESHAP subpart that was proposed by EPA after November 15, 1990; or
2) a requirement in a Title V permit that specifies a continuous compliance determination method (i.e. CEMS or COMS).

{Other exemptions are in 40 CFR 64.2(b), only the exemptions that apply to this facility are listed.}

The following emissions units are exempt from CAM because they are subject to NSPS or NESHAP regulations, or its uncontrolled emissions are below major source thresholds:

| Emission Point ID# | Pollutant(s) | Exemption Reason |
|---|---|---|
| 7961, 7962, 7962-T, 7966, 7969, 7970, 7971, 7975, 7982, 7986, 7988, 7989, 4814, 8907, and 8908 | VOC | NESHAP Subpart MMMM; No control device |
| | Organic HAPs | NESHAP Subpart MMMM; No control device |
| 7962 and 7962-T | PM (filterable) | Uncontrolled < 100 tpy |
| 7988 and 7989 | PM (filterable) | Throughput of coatings was limited so that the uncontrolled emissions < 100 tpy |
| 7975 and 7982 | PM (filterable) | Uncontrolled < 100 tpy |
| 8907 and 8908 | PM (filterable) | Throughput of coatings was limited so that the uncontrolled emissions < 100 tpy |
| 8919, 8920, and 8921 | PM (filterable) | Uncontrolled < 100 tpy |
| 8922 | PM (filterable) | Uncontrolled < 100 tpy |
| 2153, 7960, 7965, 7972, 7988, 7989, 8909, 8910, 8915, and 8916 | PM (filterable) | No control device; Uncontrolled < 100 tpy, each |
| 8912 | PM (filterable) | Uncontrolled < 100 tpy |

| Emission Point ID# | Pollutant(s) | Exemption Reason |
|---|---|---|
| 8914 | PM (filterable) | Uncontrolled < 100 tpy |
| 8933 | PM (filterable) | Uncontrolled < 100 tpy |
| 2081 | PM (filterable) | Uncontrolled < 100 tpy |
| | $NO_x$+HC<br>CO | NSPS Subpart JJJJ;<br>No control device |
| 2082 | PM (filterable) | Uncontrolled < 100 tpy |
| | $NO_x$<br>CO<br>VOC | NSPS Subpart JJJJ;<br>No control device |
| 2111 | PM (filterable) | Uncontrolled < 100 tpy |
| 2328 | PM (filterable) | Uncontrolled < 100 tpy |

**Title 129, Chapter 34 – Emission Sources; Testing and Monitoring**

No emission units are required to conduct a performance test in this operating balance. The VOC and HAP emissions from the surface coating operations are determined by the chemicals used. The PM emissions are expected to be below the permit limits due to control devices, combustion of natural gas and/or good combustion practices, depending on emission unit. The engines are not required to be tested because they combust natural gas and they use good combustion practices. NDEQ may require a source to conduct a performance test in the future, per Title 129, Chapter 34.

**Prevention of Accidental Releases of Title III, Section 112(r)**

Title 129, Chapter 8, Section 011, states that an operating permit must contain conditions pertaining to the Prevention of Accidental Releases program when a source is subject to this program [Federal Clean Air Act Section 112(r)]. CNH Industrial America is not subject to this section of the Federal Clean Air Act because the source does not produce, process, handle, or store threshold quantities of substances regulated under Section 112(r). Therefore, the operating permit does not contain conditions for the Prevention of Accidental Releases program (§68.10 and §68.115).}

**Permit Conditions II and III are discussed as follows:**

Condition II includes Specific Conditions that are standard for all permitted sources.

II.(A) This condition contains general recordkeeping requirements that apply to all permitted emission units, including a date for when records must be completed, the length of time records must be maintained, and the identification of specific types of records that must be maintained by the permittee. Records must be maintained to ensure compliance with all applicable requirements. Specific recordkeeping requirements for permitted emission units can be found in the respective sections covering the units (Title 129, Chapter 8, Section 004.02B).

II.(B) This condition specifies general submittal and reporting requirements. The reports required by this condition include semi-annual deviation reports, reports of all deviations from permit requirements, the annual emissions inventory report, a submission of emissions fees, annual certification of compliance, and excess emissions reports. Unit-specific reporting requirements are provided in Condition III of the permit (Title 129, Chapter 1, Section 135; Chapter 7, Section 008; and Chapter 8, Section 012.01).

II.(C)(1) This condition allows the permittee to make changes in the configuration of equipment at the source, defined as "Section 502(b)(10) changes (Title 129, Chapter 1, Section 139), without a permit revision, provided that the change is not a modification under the NSPS or NESHAP programs, the change does not require a construction permit, and the change does not result in emissions allowable under the permit being exceeded. If these types of changes are made at

the source, a notification must be sent to the NDEQ in accordance with Condition II.(C)(1). A permit shield does not apply to Section 502(b)(10) changes [Title 129, Chapter 15, Section 007.01].

II.(C)(2) This condition allows the permittee to make changes in equipment configuration at the source that are not defined as Section 502(b)(10) changes. These types of changes are commonly referred to as "off-permit" changes. Off-permit changes can be made without an operating permit revision if the change is not a modification under the NSPS or NESHAP programs and the change does not require a construction permit. All off-permit changes must meet all applicable requirements and cannot violate any existing permit terms or conditions. The source is required to notify both the NDEQ and the USEPA of off-permit changes. The notification must be made in accordance with Condition II.(C)(2). A permit shield does not apply to off-permit changes (Title 129, Chapter 15, Section 007.02).

For purposes of Condition II.(C), notification is not required for changes that are deemed to be routine maintenance, repair, or replacement (except when defined as reconstruction), unless the change results in an exceedance in emissions allowable under this permit; the change violates the terms of this permit as related to monitoring, recordkeeping, testing, and compliance certification; or the change violates an applicable requirement.

II.(D) This condition establishes requirements related to performance testing, should it be required. For all testing, the permittee is required to provide the NDEQ at least thirty (30) days written (i.e. hard copy, not electronic or verbal) notice prior to testing, unless the NDEQ gives approval for a notice of less than 30 days. If testing is pursuant to a requirement in federal rule, the notice provisions of the underlying requirement apply. The notification should include the emissions testing protocol. This is to ensure that the NDEQ has the opportunity to witness the emissions testing and/or review the testing plan proposed. The owner or operator must also submit the final test results within sixty (60) days after the test has occurred. Note that testing must take place when the source is operating at full capacity (Title 129, Chapter 8, Sections 004.01B and 012.01 and Chapter 34, Sections 002 and 003).

II.(E)(1) A permit shield is granted (Title 129, Chapter 8, Section 014).

II.(E)(2) This condition identifies the requirements, authorities, and liability that are not affected by a permit shield.

II.(E)(3) The permittee also requested a permit shield for requirements that appear to be applicable to CNH Industrial America but are not. The NDEQ has determined the requirements specifically identified in the following table are not applicable to this source. Therefore a permit shield for these requirements is being granted as allowed under Title 129, Chapter 8, Section 014.02B:

| Requirement | Shield Request Basis and Determination |
|---|---|
| Title 129, Chapter 18, Section 001.69 – NSPS Subpart CCCC – Commercial and Industrial Solid Waste Incineration Units | Bake-off ovens EP#8914 and EP#8932 meet the definition of burn-off ovens as specified in §60.2265. This definition states the burn-off ovens are not a regulated emission unit under this subpart. |

| Requirement | Shield Request Basis and Determination |
|---|---|
| Title 129, Chapter 28, Section 001.77 – NESHAP Subpart GGGGG – Site Remediation | This Subpart regulates remediation projects. At this point in time, CNH does not anticipate taking remedial action in the near future.<br><br>History: CNH conducted a remediation in accordance with the voluntary clean-up program in Nebraska (RAPMA ID# 36-336-4917), which included removal of impacted soil and paint-related material from the property. This activity was initiated October 2003 and completed in January 2004 and did not involve an affected source as defined in the standard. Therefore, there are (or were) no applicable emission points.<br><br>The remedial activity did not involve any regulated emission from activities such as process venting, remediation material management units or equipment leaks. The material that was removed from the site for disposal was characterized to determine disposal requirements. The impacted soil that was disposed as non-hazardous waste contained average VOHAP concentrations below 10 ppm, i.e., the threshold identified in the standard for applicability. The material that contained paint material and was determined to be hazardous waste, due to concentration of lead, was transported (under hazardous waste manifest) for disposal to the Clean Harbors incinerator facility in Kimball, Nebraska. The disposal facility is permitted under RCRA and manages the material in accordance with requirements under 40 CFR Part 63, Subpart GGGGG.<br><br>In September 2006, a pilot program for in-situ enhanced biodegradation of VOCs in groundwater was initiated. This included two treatment events conducted in September/October 2006 and April 2007, involving application of molasses, nutrients, yeast extract, and inoculum via six injection wells. The rationale for not being covered by the MACT is the same as above. |
| Title 129, Chapter 28, Section 001.74 – NESHAP Subpart PPPPP - Engine Test Cells and Stands | The engine test stand is for engines that have been installed. NESHAP Subpart PPPPP applies to engine test stands for uninstalled stationary or uninstalled mobile (motive) engines [§63.9285(a) and (b)]. |
| Title 129, Chapter 28, Section 001.70 – NESHAP Subpart DDDDD – Industrial, Commercial, and Institutional Boilers and Process Heaters at Major Sources of HAPs | Emission Units 2106, 8917, and 8918 are not subject to this subpart since these units do not meet the definition of process heaters as specified in §63.7575. These emission units are the air-makeup heater for burn-off oven vestibule, powder coat dryoff oven, and cure oven. |

II.(F) This condition requires all emission units, control equipment, and monitoring equipment to be properly installed, operated, and maintained (Title 129, Chapter 8, Section 004.01C; Chapter 11, Section 001; Chapter 34, Section 006; and Chapter 35, Sections 006.02 and 006.05).

II.(G) This condition requires the permittee to comply, in a timely matter, with requirements that become effective during the permit term (Title 129, Chapter 7, Section 006.02H, and Chapter 8, Section 012.03).

II.(H) This condition states that if there are any discrepancies between applicable NSPS or NESHAP standards and the terms and conditions of this permit, the NSPS or NESHAP standards take precedence unless they are less stringent (Title 129, Chapter 8, Section 013).

II.(I) This condition identifies the source-wide requirements. These source-wide requirements only apply if an emission unit has a performance test conducted to ensure that the emission unit is operating at a rate consistent with the performance test. The OP does not require CNH to conduct any performance test. NDEQ may require testing per Title 129, Chapter 34 at any time.

Condition III includes conditions that are specific to the emissions units and emission points listed in each respective condition.

**(A) Specific Conditions for Surface Coating and Associated Operations**

(A)(1) This condition lists all of the permitted emission points and equipment at the facility that constitute surface coating and its associated operations. The table also describes associated pollutant emission control devices.

(A)(2) The surface coating operations are subject to 40 CFR Part 63, NESHAP, Subparts A and MMMM. CNH may choose to change their compliance option from NESHAP Subpart MMMM (emission limits without add-on controls), but they have to notify NDEQ at least 30 days prior to the change. There are no NSPS Requirements applicable to this emission point.

(A)(3) The VOC and Organic HAPs for all of the material usage in the surface coating operations are limited for each consecutive 12-month period. The VOC limitation is from Construction Permit CP07-0035 issued September 7, 2007 to maintain PSD minor modification determinations from previous construction permits. The Organic HAP limitations are from NESHAP Subpart MMMM, which was required in the construction permit. The HAP limitations are for general use coating affected sources, as specified in NESHAP Subpart MMMM, which this source currently uses. If the emission units become affected sources in other coating categories (i.e. high performance coating) as specified in NESHAP Subpart MMMM, CNH must comply with the limitations per Condition III.(A)(3)(b). CNH demonstrates compliance with VOC and Organic HAP limits by calculating the monthly emissions, based on the chemicals used in the surface coating operations. The PM (filterable) and opacity limitations are from Title 129, Chapter 20 Sections 001 and 004, which CNH demonstrates compliance with the use of control devices (dry fabric filter or scrubber) on the applicable emission units.

(A)(4) CNH requested throughput limitations on Emission Units 7988, 7989, 8907, and 8908 to restrict uncontrolled particulate matter emissions to avoid CAM requirements, which NDEQ included in the OP per Title 129, Chapter 8, Section 013. The equation to calculate the monthly and consecutive 12-month actual VOC emissions is identified, which is from Construction Permit CP07-0035 which is used to demonstrate compliance with the limitations to due to the PSD minor modification. Ten of the paint booths have particulate matter control devices: two use downdraft water wash systems (scrubbers) and eight use dry fabric filters, which are required by Construction Permit CP07-0035 and by NDEQ per Title 129, Chapter 8, Section 004.01C for units with control devices but were not identified in the construction permit. The control devices have to be operated when the associated paint booth is operational. The control devices must be installed and maintained properly. The operational and maintenance of the control devices are required by Construction Permit CP07-0035 and by NDEQ per Title 129, Chapter 8, Section 004.01C for units with control devices but were not identified in the construction permit. The

painting operations are subject to the operational and monitoring requirements of NESHAP Subpart MMMM. The NESHAP monitoring includes the calculations of organic HAP per §63.3951 and §63.3952.

(A)(5) The permit has recordkeeping and reporting requirements that are used to demonstrate compliance with the VOC and HAP limitations, operational requirements of the particulate control devices, and NESHAP, Subparts A and MMMM. The records for the particulate control devices demonstrate compliance with PM (filterable) and opacity limits. The recordkeeping and reporting requirements are per by Construction Permit CP07-0035, NESHAP Subpart MMMM, and by NDEQ per Title 129, Chapter 8, Section 004.02 for the requirements to demonstrate compliance with the requirements that are in Condition III.(A)(4) that were not in the construction permit. Condition III.(A)(5)(b)(i) includes the specific recordkeeping and reporting requirements from NESHAP Subpart MMMM, that CNH specifically requested to be listed in the operating permit. NDEQ has agreed to allow the semiannual reports for NESHAP Subpart MMMM to be submitted by September 30 and March 31 (same as Condition II.(B)(1)) in accordance with 40 CFR 63.3920(a)(1) and §63.10(a)(7).

III.(B) Requirements for External Combustion Units

(B)(1) This condition lists all of the permitted emission points and equipment at the facility that are external combustion units, including boilers, air make-up units and oven. This condition does not include the burn-off ovens because they are considered incinerators (see Condition III.(C) for burn off ovens). This condition does not include external combustion units which meet the definition of insignificant activities (See Condition III.(E) for insignificant activities).

(B)(2) The pretreatment boiler (Unit #7960) is subject to NSPS, Subpart Dc. The other external combustion units are not subject to NSPS requirements. The Index line boiler (Unit # 7956), pretreatment boiler (Unit #7960) and the two powder coat hot water boilers (Units # 8915 and 8916) are subject to NESHAP Subpart DDDDD. The other external combustion units are not subject to a NESHAP subpart.

(B)(3) The external combustion units have PM(filterable) and opacity limitations per Title 129 Chapter 20 Sections 002 and 004, respectively. These combustion units are expected to meet the limitations because they combust natural gas fuel only so performance testing is not required. NSPS Subpart Dc and NESHAP Subpart DDDDD do not have emission limitations for units that combust natural gas only.

(B)(4) The pretreatment boiler is required to have a dedicated, non-resettable fuel meter to track its fuel usage per NSPS, Subpart Dc and Construction Permit CP07-0035. The external fuel combustion units listed in Condition III.(B)(1) are restricted to natural gas fuel combustion only per Construction Permit CP07-0035 and by NDEQ per Title 129, Chapter 8, Section 004.01C for units with control devices but were not identified in the construction permit. Emission Unit 7960 must comply with any additional applicable operational and monitoring requirements of NSPS Subpart Dc. Emission Units 7956, 7960, 8915, and 8916 must comply with the applicable operational and monitoring requirements of NESHAP Subpart DDDDD. Condition III.(B)(4)(d) includes the tune-up frequency requirements from NESHAP Subpart DDDDD, that CNH specifically requested to be listed in the operating permit.

(B)(5) This condition has the recordkeeping requirements that include when routine maintenance and preventative actions are performed, when equipment failures occur, and records and notifications as required by the applicable NSPS Subpart Dc and NESHAP Subpart DDDDD for Emission Units 7956, 7960, 8915, and 8916. . Condition III.(B)(5)(b) includes the specific recordkeeping

and reporting requirements from NESHAP Subpart DDDDD, that CNH specifically requested to be listed in the operating permit. NDEQ has agreed to allow the annual/biennial/5-year reports for NESHAP Subpart DDDDD to be submitted by March 31 (same as Condition II.(B)(1)) in accordance with 40 CFR 63.7750(b)(1) and §63.10(a)(7).The other emission units listed in Condition III.(B)(1) must comply with the recordkeeping and reporting requirements in Condition II. CNH will need to document that the units listed in Condition III.(B)(1) are using natural gas only, to demonstrate compliance with Condition III.(B)(4)(b).

III.(C) Requirements for Burn-Off Ovens

(C)(1) This condition describes the burn-off ovens and associated control equipment, maximum capacity of the burners, and the fuel that will be used.

(C)(2) The burn-off ovens are not subject to a NSPS or NESHAP requirement.

(C)(3) The burn-off ovens are subject to a PM(filterable) emission limitation per Title 129, Chapter 22, Section 002 and an Opacity limitation per Title 129, Chapter 20, Section 004. Burn-off ovens are considered incinerators and are subject to Title 129, Chapter 22 requirements.

(C)(4) The burn-off ovens are subject to the operating and monitoring requirements of Title 129, Chapter 22, Sections 004, 005, and 006. Additionally, the materials incinerated in the burn-off oven are limited to coatings on metal parts and paint line fixtures; otherwise they may be subject to a NSPS requirement (NSPS Subpart CCCC or DDDD for commercial and industrial solid waste incineration units). NDEQ is requiring visible emissions surveys to be conducted on each burn-off oven when the unit is operational to demonstrate compliance with Title 129, Chapter 20, Section 004.

(C)(5) This condition has the recordkeeping requirements that include routine maintenance and preventative actions that are performed on the burn-off oven, what, if any, corrective actions or repairs were completed, and records of material incinerated in the burn-off oven. This recordkeeping is required by Construction Permits CP07-0035 and CP11-032. Additionally, CNH must keep records of the visible emissions surveys and the associated corrective actions to demonstrate compliance with Title 129, Chapter 20, Section 004.

III.(D) Requirements for Reciprocating Internal Combustion Engines

(D)(1) This condition describes the emergency generator RICE, maximum capacity of the RICE, and the fuel that is combusted.

(D)(2) Units 2082 and 2111 are subject to NSPS Subpart JJJJ and NESHAP Subpart ZZZZ. Emission Units 2081 and 2328 are subject to NESHAP Subpart ZZZZ, but are not subject to a NSPS requirement.

(D)(3) Each RICE are subject to the PM (filterable) and opacity limitations per Title 129, Chapter 20, Sections 002 and 004, respectively. Compliance demonstration for PM (filterable) and opacity limitations is determined by the restriction of the fuel to natural gas. Emission Units 2082 and 2111 are subject to $NO_x$, VOC, $NO_x$+ HC, and/or CO limitations per NSPS Subpart JJJJ. HC stands for hydrocarbons. The operational and monitoring requirements of NSPS Subpart JJJJ demonstrate compliance with the associated emission limits. There are currently no emission limitations required by NESHAP Subpart ZZZZ for any of these engines.

(D)(4) Each RICE must comply with the operational and monitoring requirements of NESHAP Subpart ZZZZ. Emission Units 2082 and 2111 must comply with the operational and monitoring requirements per NSPS Subpart JJJJ. NDEQ is requiring each RICE to only combust natural gas to demonstrate compliance with PM (filterable) and opacity limitations. Condition III.(D)(4)(a) includes the specific operating and monitoring requirements from NESHAP Subpart ZZZZ, that CNH specifically requested to be listed in the operating permit. Condition III.(D)(4)(b) includes the specific operating and monitoring requirements from NSPS Subpart JJJJ, that CNH specifically requested to be listed in the operating permit.

(D)(5) Each RICE must comply with the recordkeeping and reporting requirements of NESHAP Subpart ZZZZ. Units 2082 and 2111 must comply with the recordkeeping and reporting requirements per NSPS Subpart JJJJ. CNH will need to document that the units listed in Condition III.(D)(1) are using natural gas only, to demonstrate compliance with Condition III.(D)(4)(c). Condition III.(D)(5)(a) includes the specific recordkeeping and reporting requirements from NESHAP Subpart ZZZZ, that CNH specifically requested to be listed in the operating permit. Condition III.(D)(5)(b) includes the specific recordkeeping and reporting requirements from NSPS Subpart JJJJ, that CNH specifically requested to be listed in the operating permit.

III.(E) Requirements for Insignificant Activities

(E)(1) The following table describes the insignificant activities operating at CNH and the criteria used to determine their insignificance criteria.

| Equipment ID | Unit Description[1] | Insignificance Criteria |
|---|---|---|
| 2106 | Air Make-Up Unit, 1.05 MMBtu/hr maximum capacity, natural gas fired, located in the burn-off oven vestibule, installed in 2012. | < 10 MMBtu/hr heat input |
| 2014-2017, 2022, 2024 | Air Makeup Units, six units, 6.3 MMBtu/hr each, natural gas fired | < 10 MMBtu/hr heat input |
| 2105 | Boiler Room - 0.05 MMBtu/hr heater, natural gas fired, used for comfort heat | < 10 MMBtu/hr heat input |
| N/A | Building 2 - Four radiant heaters, 0.15 MMBtu/hr each, natural gas fired | < 10 MMBtu/hr heat input |
| 2186 | Building 2 SE – 5.3 MMBtu/hr Air Makeup Unit, natural gas fired, used for comfort heat | < 10 MMBtu/hr heat input |
| 2191 | Building 3 E Center – 5.3 MMBtu/hr Air Makeup Unit, natural gas fired, used for comfort heat | < 10 MMBtu/hr heat input |
| 2190 | Building 3 North – 5.3 MMBtu/hr Air Makeup Unit, natural gas fired, used for comfort heat | < 10 MMBtu/hr heat input |
| 2187 | Builidng 4 E – 5.3 MMBtu/hr Air Makeup Unit, natural gas fired, used for comfort heat | < 10 MMBtu/hr heat input |
| N/A | Building 5- Two radiant heaters, 0.25 MMBtu/hr each, natural gas fired | < 10 MMBtu/hr heat input |
| N/A | Building 5- Six radiant heaters, 0.2 MMBtu/hr each, natural gas fired | < 10 MMBtu/hr heat input |
| 2138 | Building 5 – 2.9 MMBtu/hr Air Makeup Unit, natural gas fired, used for comfort heat | < 10 MMBtu/hr heat input |
| 2144 | Building 5 – 5.9 MMBtu/hr Air Makeup Unit, natural gas fired, used for comfort heat | < 10 MMBtu/hr heat input |

| Equipment ID | Unit Description[1] | Insignificance Criteria |
|---|---|---|
| 2189 | Building 5 Center – 5.3 MMBtu/hr Air Makeup Unit, natural gas fired, used for comfort heat | < 10 MMBtu/hr heat input |
| 2188 | Building 5 E – 5.3 MMBtu/hr Air Makeup Unit, natural gas fired, used for comfort heat | < 10 MMBtu/hr heat input |
| 2137 | Building 6 – 2.9 MMBtu/hr Air Makeup Unit, natural gas fired, used for comfort heat | < 10 MMBtu/hr heat input |
| N/A | Building 6 - 0.2 MMBtu/hr radiant heater, natural gas fired | < 10 MMBtu/hr heat input |
| 2227 | Building 6 – 2.05 MMBtu/hr Air Makeup Unit, natural gas fired | < 10 MMBtu/hr heat input |
| 2228 | Building 6 – 2.05 MMBtu/hr Air Makeup Unit, natural gas fired | < 10 MMBtu/hr heat input |
| 2011 | Building 6 North - 2.5 MMBtu/hr heater, natural gas fired, used for comfort heat | < 10 MMBtu/hr heat input |
| 2219 | Building 8 – 3.3 MMBtu/hr Air Makeup Unit, natural gas fired | < 10 MMBtu/hr heat input |
| 2104 | Door 19 - 0.05 MMBtu/hr heater, natural gas fired | < 10 MMBtu/hr heat input |
| 6319, 6320, and 6321 | Hay Equipment Manufacturing Building – Three Air Makeup Units, 4.93 MMBtu/hr each, natural gas fired, used for comfort heat | < 10 MMBtu/hr heat input |
| N/A | Hay Equipment Manufacturing Building– Four radiant heater burners, 0.24 MMBtu/hr each, natural gas fired | < 10 MMBtu/hr heat input |
| N/A | Hay Equipment Manufacturing Building – 0.36 MMBtu/hr Rooftop Air Makeup Unit, natural gas fired | < 10 MMBtu/hr heat input |
| N/A | Loading Rack – tube heaters, consisting of two 0.2 MMBtu/hr burners, natural gas fired. | < 10 MMBtu/hr heat input |
| 7926 | Mix Room - 0.1 MMBtu/hr heater, natural gas fired, used for comfort heat | < 10 MMBtu/hr heat input |
| N/A | Office – 0.15 MMBtu/hr roof top heater, natural gas fired | < 10 MMBtu/hr heat input |
| N/A | Office – 0.18 MMBtu/hr roof top heater, natural gas fired | < 10 MMBtu/hr heat input |
| N/A | Office – 0.4 MMBtu/hr roof top heater, natural gas fired | < 10 MMBtu/hr heat input |
| 2141 | Office – 1.50 MMBtu/hr boiler (hot water heater), natural gas fired, used for comfort heat, installed in November 2015. | < 10 MMBtu/hr heat input |
| 2327 | Powder Coat Environmental Room – 0.5 MMBtu/hr Air Makeup Unit, natural gas fired, used for comfort heat | < 10 MMBtu/hr heat input |
| N/A | Powder Coat Environmental Room – 2.592 MMBtu/hr Air Makeup Unit, natural gas fired, used for comfort heat | < 10 MMBtu/hr heat input |

| Equipment ID | Unit Description[1] | Insignificance Criteria |
|---|---|---|
| N/A | Shipping Building – Two radiant heaters, 0.25 MMBtu/hr each, natural gas combustion | < 10 MMBtu/hr heat input |
| N/A | Shipping Building – Six radiant heaters, 0.2 MMBtu/hr each, natural gas combustion | < 10 MMBtu/hr heat input |
| N/A | Small Parts Building – Six radiant heaters, 0.2 MMBtu/hr each, natural gas fired | < 10 MMBtu/hr heat input |
| 4814 | Strip Tank – 0.5 MMBtu/hr heater, natural gas fired. | < 10 MMBtu/hr heat input |
| 8917 | 3.0 MMBtu/hr Powder Coat Dryoff Oven, natural gas fired | < 10 MMBtu/hr heat input |
| 8918 | 8.0 MMBtu/hr Cure Oven (two burners at 4 MMBtu/hr each) | < 10 MMBtu/hr heat input |
| N/A | Two solvent recovery units, installed in 2014 | HAP emissions less than reporting levels in Title 129 Appendixes II and III |
| 00T2 | 10,000 gallon capacity storage tank, storing Diesel Fuel | Vapor pressure < 0.5 psia; < 1 million gallons throughput |
| 00T4 | 10,000 gallon capacity storage tank, storing ethylene glycol | HAP emissions less than reporting levels in Title 129 Appendixes II and III |
| N/A | Welders (219) – source wide | Welding operations with HAP emissions less than reporting levels in Title 129 Appendixes II and III |
| N/A | Laser cutters – source wide | Laser cutting operations with HAP emissions less than reporting levels in Title 129 Appendixes II and III |
| N/A | Grinders (15) – source wide | Grinding operations with HAP emissions less than reporting levels in Title 129 Appendixes II and III |
| 00NP1 | Plant Wide Maintenance Parts Washer | HAP emissions less than reporting levels in Title 129 Appendixes II and III |

[1] All emission units were constructed after February 26, 1974.

The following emission units are exempt insignificant activities, therefore they do not appear in the operating permit.

| Equipment ID | Unit Description | Insignificance Criteria |
|---|---|---|
| 00T1 | 10,000 gallon capacity storage tank, storing Motor Oil | Vapor pressure < 0.5 psia |
| 00T3 | 10,000 gallon capacity storage tank, storing Hy-Tran Transmission Fluid | Vapor pressure < 0.5 psia |
| 00T5 | 10,000 gallon capacity storage tank, storing Hydraulic 46 | Vapor pressure < 0.5 psia |
| 00T6 | 10,000 gallon capacity storage tank, storing 85/140 Gear Lube Oil | Vapor pressure < 0.5 psia |

(E)(2): The welders, laser cutters, and grinders are subject to the process weight rate limit of Title 129, Chapter 20, Section 001. The combustion units are subject to the particulate matter limit of 0.6 lb/MMBtu from fuel combustion per Title 129, Chapter 20, Section 002. All of the insignificant activities are subject to the opacity limitation of Title 129, Chapter 20, Section 004.

(E)(3): Insignificant activities are exempt from operational and monitoring limitations [Title 129, Chapter 7, Section 006.04 and Chapter 8, Sections 004.01B].

(E)(4): CNH is required to submit written notification if there are any additions or changes to the list of insignificant activities [Title 129, Chapter 8, Section 013].

The following terms and conditions from the construction permit(s) listed were not incorporated into this permit, or have been modified as discussed below:

| Permit Number and Issuance Date | Specific Condition | Reason Modified or Not Included In Operating Permit |
|---|---|---|
| CP07-0035, Issued September 7, 2007 | Condition II.(B) | This condition was not included in the OP, because the condition listed equipment that had be removed prior to the initial startup of Emission Units 8903, 8907, 8908, 8909, and 8912. The specified equipment have been removed. |
| CP07-0035, Issued September 7, 2007 | Condition III.(A)(3)(d) | This condition was modified to include inspection and replacement of fabric filter language. |

**STATUTORY OR REGULATORY PROVISIONS ON WHICH PERMIT REQUIREMENTS ARE BASED:**

Applicable regulations: Title 129 - Nebraska Air Quality Regulations as amended July 20, 2016.

**PROCEDURES FOR FINAL DETERMINATION WITH RESPECT TO THE PROPOSED OPERATING PERMIT:**

The public notice, as required under NAQR Chapter 14, shall be published on July 18, 2016 in the Grand Island Independent newspaper. Persons or groups shall have 30 days from that issuance of public notice (August 17, 2016) to provide the NDEQ with any written comments concerning the proposed permit action and/or to request a public hearing, in accordance with NAQR Chapter 14. If a public hearing is granted by the Director, there will be a notice of that meeting published at least 30 days prior to the hearing. Persons requiring further information, having comments, or requesting a public hearing may, either electronically or through hardcopy letter, contact:

David L. Christensen – Operating Permits Unit Supervisor
Air Quality Division
Nebraska Department of Environmental Quality
PO Box 98922
Lincoln, Nebraska 68509-8922
Email: NDEQ.AirQuality@nebraska.gov

If no public hearing is requested, the permit may be granted at the close of the 30-day comment period. If a public hearing is requested, the Director of the NDEQ may choose to extend the date on which the permit is to be granted until after that public hearing has been held. During the 30-day comment period, persons requiring further information should, either electronically or through hardcopy letter contact:

Stephenie Moyer – Environmental Quality Program Specialist
Air Quality Division-Permitting Section
Nebraska Department of Environmental Quality
PO Box 98922
Lincoln, Nebraska 68509-8922
Email: NDEQ.AirQuality@nebraska.gov

**Telephone inquiries may be made at:** (402) 471-2186

**TTD users should call (800) 833-7352 and ask the relay operator to call the Department at (402) 471-2186.**

Within 60 days after the US Environmental Protection Agency Administrator review, persons may petition the Administrator to object to the issuance of the proposed permit. Any such petition shall be based only on objections to the permit that were raised with reasonable specificity during the 30-day public comment period, unless the petitioner demonstrates that it was impracticable to raise such objection within such period. For specific dates for which the 60-day petition period is open, contact Stephenie Moyer at (402) 471-2186. Petitions should be mailed to:

Mark Hague, Regional Administrator
US EPA Region VII
Attn: Air Permitting & Compliance Branch
11201 Renner Boulevard
Lenexa, KS 66219

Compliance with this permit shall not be a defense to any enforcement action for violation of an ambient air quality standard.

# Fact Sheet Attachment

**Potential to Emit (tons/yr)**

| Pollutant | Surface Coating | External Combustion Units | Burn-Off Ovens | RICE | Insignificant Activities | Total |
|---|---|---|---|---|---|---|
| PM (filterable) | 4.43 | 3.57 | 0.51 | 0.18 | 4.28 | 12.98 |
| $PM_{10}$ (filterable + condensables) | 1.93 | 3.57 | 0.51 | 0.18 | 4.28 | 10.48 |
| $PM_{2.5}$ (filterable + condensables) | 1.77 | 3.57 | 0.51 | 0.18 | 4.28 | 10.32 |
| $SO_2$ | | 0.28 | 0.22 | 0.01 | 0.34 | 0.84 |
| $NO_x$ | | 46.93 | 2.23 | 21.46 | 56.33 | 126.95 |
| CO | | 39.43 | 0.64 | 33.18 | 11.83 | 85.07 |
| VOC [1] | 390.80 | 2.58 | 0.55 | 0.28 | 3.10 | 397.31 |
| **Individual HAPs** | | | | | | |
| Ethyl Benzene | 0.74 | | | 1.37E-04 | | 0.74 |
| n-Hexane | | 0.84 | 0.04 | | 1.01 | 1.90 |
| Phenol | 0.41 | | | | | 0.41 |
| Toluene | 0.72 | 1.60E-03 | 7.15E-05 | 5.27E-03 | 1.92E-03 | 0.73 |
| Xylenes | 3.72 | | | 1.84E-03 | | 3.73 |
| Other HAPs | 0.00 | 0.04 | 0.00 | 0.18 | 0.05 | 0.27 |
| Total HAPs | 5.59 | 0.89 | 0.04 | 1.17 | 1.06 | 8.75 |
| **Greenhouse Gases (GHGs)** | | | | | | |
| **Mass Basis** | | | | | | |
| Carbon Dioxide ($CO_2$) | | 55,959.07 | 2,508.69 | 0.44 | 67,162.15 | 125,630.35 |
| Methane ($CH_4$) | | 1.06 | 0.99 | 8.26E-06 | 1.27 | 3.32 |
| Nitrous Oxide ($N_2O$) | | 0.11 | 1.47 | 8.26E-07 | 0.13 | 1.70 |
| Total GHGs | | 55,960.24 | 2,511.15 | 0.44 | 67,163.55 | 125,635.37 |
| **$CO_2$ equivalents ($CO_2e$)** | | | | | | |
| Carbon Dioxide ($CO_2$) | | 55,959.07 | 2,508.69 | 0.55 | 67,162.15 | 125,630.47 |
| Methane ($CH_4$) | | 22.16 | 0.99 | 1.76E-04 | 26.60 | 49.76 |
| Nitrous Oxide ($N_2O$) | | 32.72 | 1.47 | 2.56E-04 | 39.27 | 73.45 |
| Total GHGs | | 56,013.96 | 2,511.15 | 5.53E-01 | 67,228.02 | 125,753.68 |

[1] VOC PTE for Surface Coating Operations are from permit limit in Condition III.(A)(3).

## Fact Sheet Attachment

**Emission Point IDs: 7962, 7962-T, 7988, 7989, 7975, 7982, 7969, 8907, 8908, 4814**

**Calculations in Surface Coating Operations table:**

Throughput (lbs/yr) = [Throughput (gal/yr)] x [Density (gal/yr)] {Used for Title 129, Chapter 20, Section 001 limitations}

Density (lbs/gal) =[Emission factor for PM (lbs/gal) {solid component}] + [Emission factor for VOC (lbs/gal) {volatile component}]

Emissions (tons/yr) for PM, $PM_{10}$, and $PM_{2.5}$ = [Throughput (gal/yr)] x [Emission factor (lbs/gal)] x [1 - transfer efficiency] x [1 - control efficiency]/[2000 lbs/ton]

Emissions (tons/yr) for VOC and HAPs = [Throughput (gal/yr)] x [Emission factor (lbs/gal)]/[2000 lbs/ton]

**Surface Coating Material Usage**

| Pollutant | | E-Coat System (Units 7962 and 7962-T)[2] | | Topcoat (Acrylic) Paint Booths (Units 7988 and 7989)[2] | | Touchup Booths (Unit 7975 & 7982)[2] | | Inspection and Preparation Booth (Unit 7969)[2] | Index Paint Booth System (Units 8907 and 8908)[2] | | Paint Stripper Tank (4814)[3] | Total PTE (tons/yr) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Solvent/ Additive | Coating | Solvent/ Additive | Coating | Solvent/ Additive | Coating | Solvent/ Additive | Solvent/ Additive | Coating | Additive | |
| | Throughput (gal/yr)[1] | 1,200 | 75,000 | 1,000 | 42,250 | 100 | 2,950 | 380 | 15,350 | 62,000 | 108,000 lbs | |
| | Density (lb/gal) | 9 | 4 | 7 | 12 | 7 | 13 | 7 | 7 | 13 | 1 lbs | |
| | Throughput (lbs/yr) | 10,620 | 279,750 | 6,920 | 525,970 | 684 | 37,677 | 2,599 | 107,604 | 824,600 | 108,000 | |
| PM (filterable)[4] | Emission Factor (lbs/gal) | | 3.7 | | 9.434 | | 9.172 | | | 6.43 | | |
| | Transfer Efficiency (%) | | 99% | | 50.0% | | 50% | | | 50% | | |
| | Control Efficiency (%) | | 100% | | 99.5% | | 98% | | | 98% | | |
| | Emissions (tons/yr) | 0.00 | 0.00 | 0.00 | 0.50 | 0.00 | 0.14 | 0.00 | 0.00 | 1.99 | | 2.63 |
| $PM_{10}$[4] | Emission Factor (lbs/gal) | | 3.6 | | 6.414 | | 6.238 | | | 4.37 | | |
| | Transfer Efficiency (%) | | 99% | | 50% | | 50% | | | 50% | | |
| | Control Efficiency (%) | | 100% | | 99.5% | | 98% | | | 98% | | |
| | Emissions (tons/yr) | 0.00 | 0.00 | 0.00 | 0.34 | 0.00 | 0.09 | 0.00 | 0.00 | 1.35 | | 1.79 |
| $PM_{2.5}$[4] | Emission Factor (lbs/gal) | | 3.4 | | 5.848 | | 5.686 | | | 3.99 | | |
| | Transfer Efficiency (%) | | 99% | | 50% | | 50% | | | 50% | | |
| | Control Efficiency (%) | | 100% | | 99.5% | | 98% | | | 98% | | |
| | Emissions (tons/yr) | 0.00 | 0.00 | 0.00 | 0.31 | 0.00 | 0.08 | 0.00 | 0.00 | 1.24 | | 1.63 |
| VOC | Emission Factor (lbs/gal) | 8.85 | 0.03 | 6.92 | 3.015 | 6.84 | 3.6 | 6.84 | 6.38 | 2.64 | 100% | |
| | Emissions (tons/yr) | 5.31 | 1.13 | 3.46 | 63.69 | 0.34 | 5.31 | 1.30 | 48.97 | 81.84 | 54.00 | 265.34 |

[1] Throughputs for the Surface Coating Operations are the estimated maximum throughputs of each chemical type used in each emission unit per OP application 13R1-006 received February 6, 2013, and addendum received September 29, 2015. CNH requested throughput of coating for the Topcoat Booths (42,250 gallons/yr for each booth) and the Index Booths (58,000 gallons/yr for each booth) to restrict uncontrolled particulate matter emissions to less than 100 tons/yr to avoid Compliance Assurance Monitoring (CAM) requirements.

[2] The E-Coat System's and the booths' throughput, emission factors (for PM, VOC, and HAPs), control efficiency and emissions are from the OP application OP13R1-006 received February 6, 2013 and are consistent with the 2004 and 2007 CP. For the Topcoat Booths, phenol (as a constituent of the catalyst) is used at a 2% blend with the paints, and emissions are calculated at 2% per paint gallon paint used, which is incorporated into the emission factor for phenol. For the Index Booths, the chemical composition was revised due to a change in yellow paint (main paint used) and was received in the OP application addendum submitted September 23, 2015.

[3] The Paint Stripper Tank throughputs and emission calculations submitted in the OP application OP13R1-006 were consistent with the 2007 CP. The throughput is calculated based on 3.0 totes/month of additive potentially used, each tote weighs 3000 lbs, and 12 months per year. For PTE determinations, the calculations assumes 100% is VOC and is all evaporated (none sent out as waste). The current stripper uses a caustic solution (potassium hydroxide - KOH).

[4] The $PM_{10}$ and $PM_{2.5}$ emission factors are estimated utilizing California Emission Inventory and Reporting System (CEIDARS) for water based paint usage (2/2012). The transfer efficiency used for PM, $PM_{10}$ and $PM_{2.5}$ is the amount of coating that that it transferred to the metal product. The E-Coat System has a 99% transfer efficiency. The Topcoat Booths, Touchup Booths, and Index Paint Booth System have a 50% transfer efficiency. The Topcoat Booths are controlled by a wet scrubber to control PM , $PM_{10}$, and $PM_{2.5}$ with a 99.5% control efficiency. The Touchup Booths and the Index Booths have fabric filters to control PM, $PM_{10}$, and $PM_{2.5}$ emissions with a 98% control efficiency.

## Fact Sheet Attachment

**Emission Point IDs: 7962, 7962-T, 7988, 7989, 7975, 7982, 7969, 8907, 8908, 4814**

**Surface Coating Material Usage**

| Pollutant | | E-Coat System (Units 7962 and 7962-T)[2] | | Topcoat (Acrylic) Paint Booths (Units 7988 and 7989)[2] | | Touchup Booths (Unit 7975 & 7982)[2] | | Inspection and Preparation Booth (Unit 7969)[2] | Index Paint Booth System (Units 8907 and 8908)[3] | | Paint Stripper Tank (4814)[3] | Total PTE (tons/yr) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Solvent/ Additive | Coating | Solvent/ Additive | Coating | Solvent/ Additive | Coating | Solvent/ Additive | Solvent/ Additive | Coating | Additive | |
| | Throughput (gal/yr)[1] | 1,200 | 75,000 | 1,000 | 42,250 | 100 | 2,950 | 380 | 15,350 | 62,000 | 108,000 lbs | |
| **Individual HAPs** | | | | | | | | | | | | |
| **Cumene** | Emission Factor (lbs/gal) | | | | | | | | | 0.00 | | |
| | Emissions (tons/yr) | | | | | | | | | 0.00 | | 0.00 |
| **Ethyl Benzene** | Emission Factor (lbs/gal) | | | | 0.0349 | 0.05 | | | | 0.00 | | |
| | Emissions (tons/yr) | | | | 0.74 | 0.0025 | | | | 0.00 | | 0.74 |
| **Hexamethylene Diisocyanate** | Emission Factor (lbs/gal) | | | | | 0.01 | | | | | | |
| | Emissions (tons/yr) | | | | | 0.0007 | | | | | | 0.0007 |
| **Phenol** | Emission Factor (lbs/gal) | | | | 0.0196 | | | | | | | |
| | Emissions (tons/yr) | | | | 0.41 | | | | | 0.00 | | 0.41 |
| **Toluene** | Emission Factor (lbs/gal) | | | | 0.0336 | 0.13 | | | | 0.00 | | |
| | Emissions (tons/yr) | | | | 0.71 | 0.01 | | | | 0.00 | | 0.72 |
| **Xylenes** | Emission Factor (lbs/gal) | | | | 0.1757 | 0.25 | | | | 0.00 | | |
| | Emissions (tons/yr) | | | | 3.71 | 0.01 | | | | 0.00 | | 3.72 |
| **Total HAPs** | Emissions (tons/yr) | 0.00 | 0.00 | 0.00 | 5.57 | 0.02 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 5.59 |

[1] Throughputs for the Surface Coating Operations are the estimated maximum throughputs of each chemical used in each emission unit per OP application 13R1-006 received February 6, 2013, and addendum received September 29, 2015.

[2] The E-Coat System's and the booths' throughput, emission factors (for PM, VOC, and HAPs), control efficiency and emissions submitted in the OP application OP13R1-006 are consistent with the 2007 Construction Permit. The control efficiency for the E-Coat System is due to the particulates staying in a liquid solution (no spraying involved).

[3] The Paint Stripper Tank throughputs and emission calculations submitted in the OP application OP13R1-006 are consistent with the 2007 Construction Permit. The throughput is calculated based on 3.0 totes/month of additive potentiallly used, each tote weighs 3000 lbs, and 12 months per year. For PTE determinations, the calculations assumes 100% is VOC and is all evaporated (none sent out as waste). The current stripper uses a caustic solution (potassium hydroxide - KOH).

## Fact Sheet Attachment

**Emission Point IDs: 8919, 8920, 8921, and 8922**

| | Automotic Powder Booths: Units 8919, 8920, and 8921 | Manual Powder Booth: Unit 8922 | |
|---|---|---|---|
| Number of booths: | 3 | 1 | |
| Number of guns per booth: | 8 | 6 | |
| Maximum paint throughput per gun (gr/min): | 400 | 400 | |
| Maximum gun utilization (min/hr): | 60 | 60 | (conservative value) |
| Unit conversion (gr/lb): | 7000 | 7000 | |
| Gun transfer efficiency: | 60% | 60% | |
| Overspray floor recovery: | 0% | 0% | (conservative value) |
| Final (Safety) filter efficiency: | 99% | 99% | |
| Portion of the paint that is $PM_{10}$: | 7.9% | 7.9% | |
| Maximum operating hours (hrs/yr): | 8760 | 8760 | |
| | | | |
| Potential Paint Througput (lb/hr): | 82.29 | 20.57 | |
| Potential Paint Overspray (lb/hr): | 32.91 | 8.23 | |
| Potential Paint PM (filterable) emissions (lb/hr): | 0.33 | 0.08 | |
| Potential Paint $PM_{10}$ emissions (lb/hr): | 0.0260 | 0.0065 | |
| Potential Paint $PM_{2.5}$ emissions (lb/hr): | 0.0260 | 0.0065 | Totals |
| Potential Paint PM emissions (tons/yr): | 1.442 | 0.360 | 1.802 |
| Potential Paint $PM_{10}$ emissions (tons/yr): | 0.114 | 0.028 | 0.142 |
| Potential Paint $PM_{2.5}$ emissions (tons/yr): | 0.114 | 0.028 | 0.142 |

Note: The PM, $PM_{10}$, and $PM_{2.5}$ emissions are filterable. The emission calculations were submitted in the OP application 13R1-006. The values identified as conservative are the worst-case situation (operates gun 60 min/hr and don't consider the amount of powder paint that is overspray on the floor of the booth), where actual situations are not a worst-case situation (operates guns less than 60 min/hr, and overspray powder paint is recovered and recycled within the booth).

## Fact Sheet Attachment

**Emission Point IDs: 2153, 7960, 7965, 7969, 7972, 7988, 7989, 8903, 8909, 8915, and 8916**

| Unit # | Design Capacity | |
|---|---|---|
| 2153 | 11.7 | MMBtu/hr |
| 7956 | 5.5 | MMBtu/hr |
| 7960 | 12.50 | MMBtu/hr |
| 7965 | 10.50 | MMBtu/hr |
| 7972 | 12.00 | MMBtu/hr |
| 7988 | 10.85 | MMBtu/hr |

| Unit # | Design Capacity | |
|---|---|---|
| 7989 | 10.85 | MMBtu/hr |
| 8909 | 8.00 | MMBtu/hr |
| 8910 | 14.00 | MMBtu/hr |
| 8915 | 8.40 | MMBtu/hr |
| 8916 | 5.00 | MMBtu/hr |

Total design capacity: 109.30 MMBtu/hr 0.1072 MMscf/hr
Heating value: 1,020 Btu/scf (natural gas combustion)
Operating hours: 8,760 hrs/yr

| Index System Combustion Emission Summary | | | |
|---|---|---|---|
| **Pollutant** | **Emission Factor (lbs/MMscf)[1]** | **Hourly Emissions (lbs/hr)[2]** | **Annual PTE (tons/yr)[3]** |
| PM (filterable) | 7.6 | 0.81 | 3.57 |
| $PM_{10}$ | 7.6 | 0.81 | 3.57 |
| $PM_{2.5}$ | 7.6 | 0.81 | 3.57 |
| $SO_2$ | 0.6 | 0.06 | 0.28 |
| $NO_x$ | 100 | 10.72 | 46.93 |
| CO | 84 | 9.00 | 39.43 |
| VOC | 5.5 | 0.59 | 2.58 |
| Individual HAPs | | | |
| Arsenic Compounds | 0.0002 | 2.14E-05 | 9.39E-05 |
| Benzene | 0.0021 | 2.25E-04 | 9.86E-04 |
| Beryllium Compounds | 0.000012 | 1.29E-06 | 5.63E-06 |
| Cadmium Compounds | 0.0011 | 1.18E-04 | 5.16E-04 |
| Chromium Compounds | 0.0014 | 1.50E-04 | 6.57E-04 |
| Cobalt Compounds | 0.000084 | 9.00E-06 | 3.94E-05 |
| Dichlorobenzene | 0.0012 | 1.29E-04 | 5.63E-04 |
| Formaldehyde | 0.075 | 8.04E-03 | 3.52E-02 |
| n-Hexane | 1.8 | 1.93E-01 | 8.45E-01 |
| Lead Compounds | 0.0005 | 5.36E-05 | 2.35E-04 |
| Manganese Compounds | 0.00038 | 4.07E-05 | 1.78E-04 |
| Mercury Compounds | 0.00026 | 2.79E-05 | 1.22E-04 |
| Naphthalene | 0.00061 | 6.54E-05 | 2.86E-04 |
| Nickel Compounds | 0.0021 | 2.25E-04 | 9.86E-04 |
| Polycyclic Organic Matter | 0.0000882 | 9.45E-06 | 4.14E-05 |
| Selenium Compounds | 0.000024 | 2.57E-06 | 1.13E-05 |
| Toluene | 0.0034 | 3.64E-04 | 1.60E-03 |
| Total HAPs | | 0.2024 | 0.8863 |

| **Greenhouse Gases (GHGs)** | | | **$CO_2$ equivalents** |
|---|---|---|---|
| **Mass Basis** | **(kg/MMBtu)[4]** | **(tons/yr)[5]** | **(tons $CO_2e$/yr)[6]** |
| Carbon Dioxide ($CO_2$) | 53.0 | 55,959.07 | 55,959.07 |
| Methane ($CH_4$) | 1.00E-03 | 1.06 | 22.16 |
| Nitrous Oxide ($N_2O$) | 1.00E-04 | 0.11 | 32.72 |
| Total GHGs | | 55,960.24 | 56,013.96 |

[1] Emission Factors for natural gas combustion from AP-42 Chapter 1.4 (7/1998), Tables 1.4-1, 1.4-2, 1.4-3, and 1.4-4. $PM_{10}$ and $PM_{2.5}$ are assumed the same as PM (filterable).

[2] For natural gas combustion: lbs/hr = (lb/MMscf) x (MMscf/hr)

[3] (tons/yr) = (lbs/hr) x (8,760 hr/yr)/(2,000 lb/ton)

[4] All emission factors are default values from 40 CFR 98 Tables C-1 and C-2. This PTE summary follows the methodologies prescribed in 40 CFR Part 98.

[5] GHG (tons/yr) = [Emission Factor (kg/MMBtu)] x (Potential Heat Input Capacity (MMBtu/yr)]/(907.18 kg/tons)

[6] tons $CO_2e$/yr = [(tons/yr $CO_2$)*1]or[(tons/yr $CH_4$)*21] or [(tons/yr $N_2O$)*310]; $CO_2$ equivalents are found in 40 CFR Part 98 Subpart A Table A-1 *Global Warming Potentials* published on October 30, 2009 (Title 129, Chapter 1). The GWP for $CO_2$ =1, for $CH_4$ =21, and for $N_2O$ = 310.

## Fact Sheet Attachment

**Emission Point IDs: 8912, 8914, and 8933**

Heating value: 1,020 Btu/scf (natural gas combustion)
Operating hours: 8,760 hrs/yr

| | | #8912 - Burn-Off Oven | | #8914 - Burn-Off Oven | | #8933 - Burn-Off Oven | | |
|---|---|---|---|---|---|---|---|---|
| | **Design burn rate of organic matter:** | 20 lbs/hr | | 75 lbs/hr | | 75 lbs/hr | | |
| | | 175,200 lb/yr | | 657,000 lb/yr | | 657,000 lb/yr | | |
| | **Design rate of burner:** | 0.8 MMBtu/hr | | 2.05 MMBtu/hr | | 2.05 MMBtu/hr | | |
| | | 0.0008 MMscf/hr | | 0.0020 MMscf/hr | | 0.0020 MMscf/hr | | |
| **Pollutant** | **Emission Factor** | **Hourly Emissions (lbs/hr)[1]** | **Annual PTE (tons/yr)[4]** | **Hourly Emissions (lbs/hr)[1]** | **Annual PTE (tons/yr)[4]** | **Hourly Emissions (lbs/hr)[1]** | **Annual PTE (tons/yr)[4]** | **Total Annual PTE (tons/yr)** |
| PM | | 0.027 | 0.12 | 0.045 | 0.20 | 0.045 | 0.20 | 0.51 |
| $PM_{10}$ | | 0.027 | 0.12 | 0.045 | 0.20 | 0.045 | 0.20 | 0.51 |
| $PM_{2.5}$ | | 0.027 | 0.12 | 0.045 | 0.20 | 0.045 | 0.20 | 0.51 |
| $SO_2$ | | 0.0036 | 0.02 | 0.023 | 0.10 | 0.023 | 0.10 | 0.22 |
| $NO_x$ | | 0.0542 | 0.24 | 0.227 | 0.99 | 0.227 | 0.99 | 2.23 |
| CO | | 0.1 | 0.44 | 0.023 | 0.10 | 0.023 | 0.10 | 0.64 |
| VOC | | 0.0348 | 0.15 | 0.045 | 0.20 | 0.045 | 0.20 | 0.55 |
| **Individual HAPs** | **(lbs/MMscf)[2]** | **(lbs/hr)[3]** | **(tons/yr)[4]** | **(lbs/hr)[3]** | **(tons/yr)[4]** | **(lbs/hr)[3]** | **(tons/yr)[4]** | **(tons/yr)** |
| Arsenic Compounds | 0.0002 | 1.57E-07 | 6.87E-07 | 4.02E-07 | 1.76E-06 | 4.02E-07 | 1.76E-06 | 4.21E-06 |
| Benzene | 0.0021 | 1.65E-06 | 7.21E-06 | 4.22E-06 | 1.85E-05 | 4.22E-06 | 1.85E-05 | 4.42E-05 |
| Beryllium Compounds | 0.000012 | 9.41E-09 | 4.12E-08 | 2.41E-08 | 1.06E-07 | 2.41E-08 | 1.06E-07 | 2.52E-07 |
| Cadmium Compounds | 0.0011 | 8.63E-07 | 3.78E-06 | 2.21E-06 | 9.68E-06 | 2.21E-06 | 9.68E-06 | 2.31E-05 |
| Chromium Compounds | 0.0014 | 1.10E-06 | 4.81E-06 | 2.81E-06 | 1.23E-05 | 2.81E-06 | 1.23E-05 | 2.95E-05 |
| Cobalt Compounds | 0.000084 | 6.59E-08 | 2.89E-07 | 1.69E-07 | 7.39E-07 | 1.69E-07 | 7.39E-07 | 1.77E-06 |
| Dichlorobenzene | 0.0012 | 9.41E-07 | 4.12E-06 | 2.41E-06 | 1.06E-05 | 2.41E-06 | 1.06E-05 | 2.52E-05 |
| Formaldehyde | 0.075 | 5.88E-05 | 2.58E-04 | 1.51E-04 | 6.60E-04 | 1.51E-04 | 6.60E-04 | 1.58E-03 |
| n-Hexane | 1.8 | 1.41E-03 | 6.18E-03 | 3.62E-03 | 1.58E-02 | 3.62E-03 | 1.58E-02 | 3.79E-02 |
| Lead Compounds | 0.0005 | 3.92E-07 | 1.72E-06 | 1.00E-06 | 4.40E-06 | 1.00E-06 | 4.40E-06 | 1.05E-05 |
| Manganese Compounds | 0.00038 | 2.98E-07 | 1.31E-06 | 7.64E-07 | 3.35E-06 | 7.64E-07 | 3.35E-06 | 8.00E-06 |
| Mercury Compounds | 0.00026 | 2.04E-07 | 8.93E-07 | 5.23E-07 | 2.29E-06 | 5.23E-07 | 2.29E-06 | 5.47E-06 |
| Naphthalene | 0.00061 | 4.78E-07 | 2.10E-06 | 1.23E-06 | 5.37E-06 | 1.23E-06 | 5.37E-06 | 1.28E-05 |

[1] Emission Factors (lbs/hr) for Burn-off oven #8912 from Manufacturer's Data Sheet: Pollution Control Products Co., Controlled Pyrolysis Furnaces with J-121 Burners (May 27, 1994). Emission Factors (lbs/hr) for Burn-off ovens #8914 and 8933 from Manufacturer's Data Sheet: *Heat-Cleaning Oven Process Description* (submitted for 2011 construction permit). All PM (filterable) emissions are considered to be $PM_{2.5}$.

[2] Emission Factors for natural gas combustion from AP-42 Chapter 1.4 (7/1998), Tables ~~1.4-1, 1.4-2,~~ 1.4-3, and 1.4-4.

[3] For natural gas combustion: lbs/hr = (lb/MMscf) x (MMscf/hr)

[4] (tons/yr) = (lbs/hr) x (8,760 hr/yr)/(2,000 lb/ton)

## Fact Sheet Attachment

**Emission Point IDs: 8912, 8914, and 8933**

| | | #8912 - Burn-Off Oven | | #8914 - Burn-Off Oven | | #8933 - Burn-Off Oven | | |
|---|---|---|---|---|---|---|---|---|
| **Pollutant** | **Emission Factor** | **Hourly Emissions (lbs/hr)[1]** | **Annual PTE (tons/yr)[4]** | **Hourly Emissions (lbs/hr)[1]** | **Annual PTE (tons/yr)[4]** | **Hourly Emissions (lbs/hr)[1]** | **Annual PTE (tons/yr)[4]** | **Total Annual PTE (tons/yr)** |
| Nickel Compounds | 0.0021 | 1.65E-06 | 7.21E-06 | 4.22E-06 | 1.85E-05 | 4.22E-06 | 1.85E-05 | 4.42E-05 |
| Polycyclic Organic Matter | 0.0000882 | 6.92E-08 | 3.03E-07 | 1.77E-07 | 7.76E-07 | 1.77E-07 | 7.76E-07 | 1.86E-06 |
| Selenium Compounds | 0.000024 | 1.88E-08 | 8.24E-08 | 4.82E-08 | 2.11E-07 | 4.82E-08 | 2.11E-07 | 5.05E-07 |
| Toluene | 0.0034 | 2.67E-06 | 1.17E-05 | 6.83E-06 | 2.99E-05 | 6.83E-06 | 2.99E-05 | 7.15E-05 |
| Total HAPs | | 1.48E-03 | 6.49E-03 | 3.80E-03 | 1.66E-02 | 3.80E-03 | 1.66E-02 | 0.04 |
| **Greenhouse Gases (GHGs)** | | | | | | | | |
| | **(kg/MMBtu)[5]** | **(tons/yr)[6]** | **(tons $CO_2e$/yr)[7]** | **(tons/yr)[6]** | **(tons $CO_2e$/yr)[7]** | **(tons/yr)[6]** | **(tons $CO_2e$/yr)[7]** | **(tons $CO_2e$/yr)** |
| Carbon Dioxide ($CO_2$) | 53.0 | 409.58 | 409.58 | 1,049.55 | 1,049.55 | 1,049.55 | 1,049.55 | 2,508.69 |
| Methane ($CH_4$) | 1.00E-03 | 0.008 | 0.16 | 0.020 | 0.42 | 0.020 | 0.42 | 0.99 |
| Nitrous Oxide ($N_2O$) | 1.00E-04 | 0.0008 | 0.24 | 0.0020 | 0.61 | 0.0020 | 0.61 | 1.47 |
| Total GHGs | | 409.59 | 409.98 | 1,049.57 | 1,050.58 | 1,049.57 | 1,050.58 | 2,511.15 |

[1] Emission Factors (lbs/hr) for Burn-off oven #8912 from Manufacturer's Data Sheet: Pollution Control Products Co., Controlled Pyrolysis Furnaces with J-121 Burners (May 27, 1994). Emission Factors (lbs/hr) for Burn-off ovens #8914 and 8933 from Manufacturer's Data Sheet: *Heat-Cleaning Oven Process Description* (submitted for 2011 construction permit). All PM (filterable) emissions are considered to be $PM_{2.5}$.

[2] Emission Factors for natural gas combustion from AP-42 Chapter 1.4 (7/1998), Tables 1.4-1, 1.4-2, 1.4-3, and 1.4-4.

[3] For natural gas combustion: lbs/hr = (lb/MMscf) x (MMscf/hr)

[4] (tons/yr) = (lbs/hr) x (8,760 hr/yr)/(2,000 lb/ton)

[5] All emission factors are default values from 40 CFR 98 Tables C-1 and C-2. This PTE summary follows the methodologies prescribed in 40 CFR Part 98.

[6] GHG (tons/yr) = [Emission Factor (kg/MMBtu)] x (Potential Heat Input Capacity (MMBtu/yr)]/(907.18 kg/tons)

[7] tons $CO_2e$/yr = [(tons/yr $CO_2$)*1]or[(tons/yr $CH_4$)*21] or [(tons/yr $N_2O$)*310]; $CO_2$ equivalents are found in 40 CFR Part 98 Subpart A Table A-1 *Global Warming Potentials* published on October 30, 2009 (Title 129, Chapter 1). The GWP for $CO_2$ =1, for $CH_4$ =21, and for $N_2O$ = 310.

## Fact Sheet Attachment

**Emission Point IDs: 2081, 2082, 2328, and 2111**

| | 2081 | | 2082 | | 2328 | | 2111 | | |
|---|---|---|---|---|---|---|---|---|---|
| Engine Output (bhp): | 51 bhp | | 64 bhp | | 13 bhp | | 190 bhp | | |
| Maximum Heat Capacity: [1] | 0.36 MMBtu/hr | | 0.45 MMBtu/hr | | 0.09 MMBtu/hr | | 1.26 MMBtu/hr | | |
| Maximum operating hours (hrs/yr): | 8,760 hr/yr | | 8,760 hr/yr | | 8,760 hr/yr | | 8,760 hr/yr | | |
| **Pollutant** | **Emission Factor (lb/MMBtu)[2]** | **Potential Emission Rate (lb/hr)[3]** | **Potential Annual Emissions (ton/yr) [4]** | **Potential Emission Rate (lb/hr)[3]** | **Potential Annual Emissions (ton/yr) [4]** | **Potential Emission Rate (lb/hr)[3]** | **Potential Annual Emissions (ton/yr) [4]** | **Potential Emission Rate (lb/hr)[3]** | **Potential Annual Emissions (ton/yr) [4]** | **Total Potential Annual Emissions (tons/yr)** |
| PM | 1.94E-02 | 0.007 | 0.031 | 0.009 | 0.038 | 0.002 | 0.008 | 0.024 | 0.107 | 0.183 |
| $PM_{10}$ | 1.94E-02 | 6.99E-03 | 3.06E-02 | 8.70E-03 | 3.81E-02 | 0.002 | 7.65E-03 | 0.024 | 0.107 | 0.183 |
| $PM_{2.5}$ | 1.94E-02 | 6.99E-03 | 3.06E-02 | 8.70E-03 | 3.81E-02 | 0.002 | 7.65E-03 | 0.024 | 0.107 | 0.183 |
| $SO_x$ | 5.88E-04 | 2.12E-04 | 9.27E-04 | 2.63E-04 | 1.15E-03 | 0.000 | 2.32E-04 | 0.001 | 3.25E-03 | 0.006 |
| $NO_x$ | 2.27 | 8.17E-01 | 3.579 | 1.02E+00 | 4.454 | 0.204 | 0.895 | 2.860 | 12.528 | 21.456 |
| CO | 3.510 | 1.26E+00 | 5.535 | 1.57E+00 | 6.887 | 0.316 | 1.384 | 4.423 | 19.371 | 33.177 |
| VOC | 0.030 | 1.07E-02 | 0.047 | 1.33E-02 | 0.058 | 0.003 | 0.012 | 0.037 | 0.163 | 0.280 |
| **Individual HAPs** | **(lb/MMBtu)[2]** | **(lb/hr)[3]** | **(tons/yr)[4]** | **(lb/hr)[3]** | **(tons/yr)[4]** | **(lb/hr)[3]** | **(tons/yr)[4]** | **(lb/hr)[3]** | **(tons/yr)[4]** | **(tons/yr)** |
| Acetaldehyde | 2.79E-03 | 1.00E-03 | 4.40E-03 | 1.25E-03 | 5.47E-03 | 2.51E-04 | 1.10E-03 | 1.00E-03 | 4.40E-03 | 1.54E-02 |
| Acrolein | 2.63E-03 | 9.47E-04 | 4.15E-03 | 1.18E-03 | 5.16E-03 | 2.37E-04 | 1.04E-03 | 9.47E-04 | 4.15E-03 | 1.45E-02 |
| Benzene | 1.58E-03 | 5.69E-04 | 2.49E-03 | 7.08E-04 | 3.10E-03 | 1.42E-04 | 6.23E-04 | 5.69E-04 | 2.49E-03 | 8.71E-03 |
| 1,3-Butadiene | 6.63E-04 | 2.39E-04 | 1.05E-03 | 2.97E-04 | 1.30E-03 | 5.97E-05 | 2.61E-04 | 2.39E-04 | 1.05E-03 | 3.65E-03 |
| Carbon Tetrachloride | 1.77E-04 | 6.37E-05 | 2.79E-04 | 7.93E-05 | 3.47E-04 | 1.59E-05 | 6.98E-05 | 6.37E-05 | 2.79E-04 | 9.75E-04 |
| Chlorobenzene | 1.29E-05 | 4.64E-06 | 2.03E-05 | 5.78E-06 | 2.53E-05 | 1.16E-06 | 5.09E-06 | 4.64E-06 | 2.03E-05 | 7.11E-05 |
| Chloroform | 1.37E-05 | 4.93E-06 | 2.16E-05 | 6.14E-06 | 2.69E-05 | 1.23E-06 | 5.40E-06 | 4.93E-06 | 2.16E-05 | 7.55E-05 |
| 1,3-Dichloropropene | 1.27E-05 | 4.57E-06 | 2.00E-05 | 5.69E-06 | 2.49E-05 | 1.14E-06 | 5.01E-06 | 4.57E-06 | 2.00E-05 | 7.00E-05 |
| Ethylbenzene | 2.48E-05 | 8.93E-06 | 3.91E-05 | 1.11E-05 | 4.87E-05 | 2.23E-06 | 9.78E-06 | 8.93E-06 | 3.91E-05 | 1.37E-04 |
| Ethylene Dibromide | 2.13E-05 | 7.67E-06 | 3.36E-05 | 9.54E-06 | 4.18E-05 | 1.92E-06 | 8.40E-06 | 7.67E-06 | 3.36E-05 | 1.17E-04 |
| Formaldehyde | 2.05E-02 | 7.38E-03 | 0.03 | 9.18E-03 | 0.04 | 1.85E-03 | 0.01 | 7.38E-03 | 0.03 | 0.11 |
| Methanol | 3.06E-03 | 1.10E-03 | 4.83E-03 | 1.37E-03 | 6.00E-03 | 2.75E-04 | 1.21E-03 | 1.10E-03 | 4.83E-03 | 1.69E-02 |

## Fact Sheet Attachment

**Emission Point IDs: 2081, 2082, 2328, and 2111**

| | | 2081 | | 2082 | | 2328 | | 2111 | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **Pollutant** | **Emission Factor (lb/MMBtu)[2]** | **Potential Emission Rate (lb/hr)[3]** | **Potential Annual Emissions (ton/yr) [4]** | **Potential Emission Rate (lb/hr)[3]** | **Potential Annual Emissions (ton/yr) [4]** | **Potential Emission Rate (lb/hr)[3]** | **Potential Annual Emissions (ton/yr) [4]** | **Potential Emission Rate (lb/hr)[3]** | **Potential Annual Emissions (ton/yr) [4]** | **Total Potential Annual Emissions (tons/yr)** |
| Methylene Chloride | 4.12E-05 | 1.48E-05 | 6.50E-05 | 1.85E-05 | 8.08E-05 | 3.71E-06 | 1.62E-05 | 5.19E-05 | 2.27E-04 | 3.89E-04 |
| Naphthalene | 9.71E-05 | 3.50E-05 | 1.53E-04 | 4.35E-05 | 1.91E-04 | 8.74E-06 | 3.83E-05 | 1.22E-04 | 5.36E-04 | 9.18E-04 |
| Polycyclic Organic Matter | 1.41E-04 | 5.08E-05 | 2.22E-04 | 6.32E-05 | 2.77E-04 | 1.27E-05 | 5.56E-05 | 1.78E-04 | 7.78E-04 | 1.33E-03 |
| Styrene | 1.19E-05 | 4.28E-06 | 1.88E-05 | 5.33E-06 | 2.34E-05 | 1.07E-06 | 4.69E-06 | 1.50E-05 | 6.57E-05 | 1.12E-04 |
| Toluene | 5.58E-04 | 2.01E-04 | 8.80E-04 | 2.50E-04 | 1.09E-03 | 5.02E-05 | 2.20E-04 | 7.03E-04 | 3.08E-03 | 5.27E-03 |
| 1,1,2,2-Tetrachloroethane | 2.53E-05 | 9.11E-06 | 3.99E-05 | 1.13E-05 | 4.96E-05 | 2.28E-06 | 9.98E-06 | 3.19E-05 | 1.40E-04 | 2.39E-04 |
| 1,1,2-Trichloroethane | 1.53E-05 | 5.51E-06 | 2.41E-05 | 6.85E-06 | 3.00E-05 | 1.38E-06 | 6.03E-06 | 1.93E-05 | 8.44E-05 | 1.45E-04 |
| Vinyl Chloride | 7.18E-06 | 2.58E-06 | 1.13E-05 | 3.22E-06 | 1.41E-05 | 6.46E-07 | 2.83E-06 | 9.05E-06 | 3.96E-05 | 6.79E-05 |
| Xylene | 1.95E-04 | 7.02E-05 | 3.07E-04 | 8.74E-05 | 3.83E-04 | 1.76E-05 | 7.69E-05 | 2.46E-04 | 1.08E-03 | 1.84E-03 |
| Total HAPs | 0.42 | 0.39 | 0.38 | 0.33 | 0.31 | 0.25 | 0.25 | 0.24 | 0.23 | 1.17 |
| **Greenhouse Gases (GHGs)** | **(kg/MMBtu)[5]** | **(tons/yr)[6]** | **(tons$CO_2$e/yr)[7]** | **(tons/yr)[6]** | **(tons$CO_2$e/yr)[7]** | **(tons/yr)[6]** | **(tons$CO_2$e/yr)[7]** | **(tons/yr)[6]** | **(tons$CO_2$e/yr)[7]** | **(tons$CO_2$e/yr)** |
| Carbon Dioxide ($CO_2$) | 53.0 | 0.09 | 0.092 | 0.11 | 0.115 | 0.02 | 0.023 | 0.32 | 0.323 | 0.552 |
| Methane ($CH_4$) | 1.00E-03 | 1.74E-06 | 3.65E-05 | 2.16E-06 | 4.54E-05 | 4.35E-07 | 9.13E-06 | 6.08E-06 | 1.28E-04 | 1.76E-04 |
| Nitrous Oxide ($N_2O$) | 1.00E-04 | 1.74E-07 | 5.39E-05 | 2.16E-07 | 6.71E-05 | 4.35E-08 | 1.35E-05 | 6.08E-07 | 1.89E-04 | 2.56E-04 |
| Total GHGs | - | 0.09 | 0.09 | 0.11 | 0.11 | 0.02 | 0.02 | 0.32 | 0.32 | 0.553 |

[1] MMBtu/hr = (hp * 7000 Btu/(hp*hr))/(1000000 Btu/MMBtu)

[2] AP-42 Chapter 3.2 (7/2000), Table 3.2-3.

[3] lb/MMBtu: (lb/hr) = (MMBtu/hr)*(lb/MMBtu); g/bhp: (lb/hr) = (bhp)*(g/bhp-hr)*(0.002205 lb/gr)

[4] tons/yr = (lbs/hr)*(8760 hrs/yr)/(2000 lbs/ton)

[5] All emission factors are default values from 40 CFR 98 Tables C-1 and C-2. This PTE summary follows the methodologies prescribed in 40 CFR Part 98.

[6] GHG (tons/yr) = {[Emission Factor (kg/MMBtu)] x (Potential Heat Input Capacity (MMBtu/yr)]/(907.18 kg/tons)} x (hrs/yr)/(2000 lb/tons)

[7] tons $CO_2$e/yr = [(tons/yr $CO_2$)*1]or[(tons/yr $CH_4$)*21] or [(tons/yr $N_2O$)*310]; $CO_2$ equivalents are found in 40 CFR Part 98 Subpart A Table A-1 *Global Warming Potentials* published on October 30, 2009 (Title 129, Chapter 1). The GWP for $CO_2$ =1, for $CH_4$ =21, and for $N_2O$ = 310.

## Fact Sheet Attachment

**Insignificant Activities - Combustion Units**

These units are combustion units listed in the insignificant activities in the Operating Permit.

| | | |
|---|---|---|
| Total design capacity: | 131.18 MMBtu/hr | 0.1286 MMscf/hr |
| Heating value: | 1,020 Btu/scf | (natural gas combustion) |
| Operating hours: | 8,760 hrs/yr | |

| Pollutant | Emission Factor (lbs/MMscf) | Hourly Emissions (lbs/hr) | Annual PTE (tons/yr) | |
|---|---|---|---|---|
| PM | 7.6 | 0.98 | 4.28 | |
| $PM_{10}$ | 7.6 | 0.98 | 4.28 | |
| $PM_{2.5}$ | 7.6 | 0.98 | 4.28 | |
| $SO_2$ | 0.6 | 0.08 | 0.34 | |
| $NO_x$ | 100 | 12.86 | 56.33 | |
| CO | 21 | 2.70 | 11.83 | |
| VOC | 5.5 | 0.71 | 3.10 | |
| **Individual HAPs** | | | | |
| Arsenic Compounds | 0.0002 | 2.57E-05 | 1.13E-04 | |
| Benzene | 0.0021 | 2.70E-04 | 1.18E-03 | |
| Beryllium Compounds | 0.000012 | 1.54E-06 | 6.76E-06 | |
| Cadmium Compounds | 0.0011 | 1.41E-04 | 6.20E-04 | |
| Chromium Compounds | 0.0014 | 1.80E-04 | 7.89E-04 | |
| Cobalt Compounds | 0.000084 | 1.08E-05 | 4.73E-05 | |
| Dichlorobenzene | 0.0012 | 1.54E-04 | 6.76E-04 | |
| Formaldehyde | 0.075 | 9.65E-03 | 4.22E-02 | |
| n-Hexane | 1.8 | 2.31E-01 | 1.01E+00 | |
| Lead Compounds | 0.0005 | 6.43E-05 | 2.82E-04 | |
| Manganese Compounds | 0.00038 | 4.89E-05 | 2.14E-04 | |
| Mercury Compounds | 0.00026 | 3.34E-05 | 1.46E-04 | |
| Naphthalene | 0.00061 | 7.85E-05 | 3.44E-04 | |
| Nickel Compounds | 0.0021 | 2.70E-04 | 1.18E-03 | |
| Polycyclic Organic Matter | 0.0000882 | 1.13E-05 | 4.97E-05 | |
| Selenium Compounds | 0.000024 | 3.09E-06 | 1.35E-05 | |
| Toluene | 0.0034 | 4.37E-04 | 1.92E-03 | |
| Total HAPs | | 0.2429 | 1.0638 | |
| **Greenhouse Gases (GHGs)** | **(kg/MMBtu)[4]** | | **(tons/yr)[5]** | **(tons $CO_2e$/yr)[6]** |
| Carbon Dioxide ($CO_2$) | 53.0 | | 67,162.15 | 67,162.15 |
| Methane ($CH_4$) | 1.00E-03 | | 1.27 | 26.60 |
| Nitrous Oxide ($N_2O$) | 1.00E-04 | | 0.13 | 39.27 |
| Total GHGs | | | 67,163.55 | 67,228.02 |

[1] Emission Factors for natural gas combustion from AP-42 Chapter 1.4 (7/1998), Tables 1.4-1, 1.4-2, 1.4-3, and 1.4-4.

[2] For natural gas combustion: lbs/hr = (lb/MMscf) x (MMscf/hr)

[3] (tons/yr) = (lbs/hr) x (8,760 hr/yr)/(2,000 lb/ton)

[4] All emission factors are default values from 40 CFR 98 Tables C-1 and C-2. This PTE summary follows the

[5] GHG (tons/yr) = [Emission Factor (kg/MMBtu)] x (Potential Heat Input Capacity (MMBtu/yr)]/(907.18 kg/tons)

[6] tons $CO_2e$/yr = [(tons/yr $CO_2$)*1]or[(tons/yr $CH_4$)*21] or [(tons/yr $N_2O$)*310]; $CO_2$ equivalents are found in 40 CFR Part 98 Subpart A Table A-1 *Global Warming Potentials* published on October 30, 2009 (Title 129, Chapter 1). The GWP for $CO_2$ =1, for $CH_4$ =21, and for $N_2O$ = 310.

# Fact Sheet Attachment

**Insignificant Activities - Welding**

**Welding**

| | | |
|---|---|---|
| Wire used | 15.28 | lbs wire/robot*hr |
| Robots | 11 | |
| Welders | 219 | |
| Maximum operating hours | 8760 | hrs/yr |
| | | |
| Hourly wire use: | 168.08 | lbs wire/hr |
| Annual wire use: | 1,472,380.80 | lbs wire/yr |

Emission factors are from FIRE 6.25 - SCC 309005254 due to E70S electrode gas metal arc welding.
Potential Hourly Emissions: ((lbs wire/hr)/1,000)*(emission factor lbs/1000 lb electrode consumed) = lbs emissions/hr
Potential Annual Emissions: ((lbs wire/yr)/1,000)*(emission factor lbs/1000 lb electrode consumed)/(2,000 lbs/ton) = tons emissions/yr

| Hay Equipment Manufacturing - Welding Emissions | | | | |
|---|---|---|---|---|
| **Pollutant** | **Emission Factor (lbs/1000 lb electrode)** | **Hourly Emissions (lbs/hr)** | **Annual Emissions (lbs/yr)** | **Annual Emissions (tons/yr)** |
| PM | 0.00520 | 8.74E-04 | 7.656 | 3.83E-03 |
| $PM_{10}$ | 0.00520 | 8.74E-04 | 7.656 | 3.83E-03 |
| $PM_{2.5}$ [1] | 0.00520 | 8.74E-04 | 7.656 | 3.83E-03 |
| Chromium Compounds | 0.00100 | 1.68E-04 | 1.472 | 7.36E-04 |
| Cobalt Compounds | 0.00100 | 1.68E-04 | 1.472 | 7.36E-04 |
| Manganese Compounds | 0.00318 | 5.34E-04 | 4.682 | 2.34E-03 |
| Nickel Compounds | 0.00100 | 1.68E-04 | 1.472 | 7.36E-04 |

[1] Assumes that $PM_{2.5}$ is equal to $PM_{10}$ and PM emission rate. The emission calculations were submitted in the OP application 13R1-006.